

# Academic perceptions of Educational Technology: Towards communicative rationality in the Higher Education Institution

Pritpal Singh Sembi BA (Hons), DipHE, MA, SFHEA.

A thesis submitted in partial fulfilment of the requirements of the University of  
Wolverhampton for the degree of Doctor of Education in Educational Enquiry

March 2019

This work or any part thereof has not previously been presented in any form  
to the University or to any other body whether for the purposes of  
assessment, publication or for any other purpose (unless otherwise  
indicated). Save for any express acknowledgments, references and/or  
bibliographies cited in the work, I confirm that the intellectual content of the  
work is the result of my own efforts and of no other person.

The right of Pritpal Singh Sembi to be identified as author of this work is  
asserted in accordance with ss.77 and 78 of the Copyright, Designs and  
Patents Act 1988. At this date copyright is owned by the author.

Signature *P Sembi*

Date March 2019

## Abstract

This thesis explores the management of change in higher education by applying a Habermasian conceptual framework to understand, explore and operationalise academic perceptions of Educational Technology. It questions the uncritical acceptance of techgerialism (i.e. managerialism through technology) in the Higher Education Institution (HEI) in a case study of academic perceptions of Educational Technology over a decade of change in one post-1992 HEI.

Perceptions were drawn from participants in one school in the HEI to counter the paucity of research focusing on academics' views of Educational Technology. Increasingly in-depth interviews were conducted over three rounds of data collection in an emergent research design based on narrative analysis. Each phase of change was interpreted as an example of formal, political and then more collegial change respectively.

Academic participants expressed broadly similar negative perceptions of Educational Technology change in their HEI: suspicion, resistance, displacement and lack of confidence in leadership. These were categorised as examples of Habermasian social pathologies (anomie, alienation, disintegration and social instability) rooted in concerns about an increasingly powerful HEI systemworld. When discussing Educational Technology, participants expressed socio-cultural concerns more readily than they addressed pedagogic issues and demonstrated both critical and tolerant beliefs towards the management of change. The insider-outsider position of the researcher changed during the research which influences its development. The impact of this shifting perspective is considered reflexively throughout the thesis.

The main contribution to knowledge is the augmentation of a Habermasian conceptual framework around lifeworld, systemworld and communicative rationality. Adapting his theory of social pathologies, the thesis suggests that there are corollary values, predominantly unarticulated by the participants, which may ameliorate these pathologies. The Educational Technology pathologies found in the data are 'inverted' to values (e.g. anomie to enculturation, alienation to solidarity) as part of the analysis. The thesis concludes by presenting a mechanism for operationalising a Habermasian public sphere, informed by these identified values, as a forum for developing intersubjective consensus and undistorted communication in the HEI.

# Table of Contents

Abstract.....	2
Acknowledgements.....	7
<b>Chapter One: Introduction.....</b>	<b>8</b>
1.1 Context .....	8
1.2 Thesis aims.....	10
1.3 Research questions and rationale for study.....	11
1.4 Organisation of thesis.....	12
1.5 Scope and disclaimer.....	13
<b>Chapter Two: Literature Review.....</b>	<b>15</b>
2.0 Introduction.....	15
2.1 <i>Part One – Educational Technology</i> .....	16
2.1.1 Defining Educational Technology.....	16
2.1.2 Exploring the rationale for using Ed Tech in the modern HEI.....	19
2.1.3 Tech-positive research trends as justification for Ed Tech.....	22
2.1.4 Prevalence of technological rationality as driver for Ed Tech.....	24
2.1.5 Multifarious expectations of the modern HEI.....	26
2.1.6 Social determinism as alternative.....	28
2.1.7 The critical academic voice.....	30
2.1.8 Evolving Ed Tech leadership.....	31
2.2 <i>Part Two – Applying Habermas</i> .....	35
2.2.1 The influence of Habermas.....	35
2.2.2 Systemworld and lifeworld.....	36

2.2.3	Colonisation of the lifeworld.....	39
2.2.4	Communicative rationality.....	40
2.2.5	Managerial systemworld.....	42
2.2.6	Techgerialism and pathologies.....	44
2.2.7	Voice and the public sphere.....	47
2.2.8	Beyond Habermas.....	51
2.3	Conclusion and research questions .....	53
<b>Chapter Three: Research Design.....</b>		<b>55</b>
3.01	Introduction.....	55
3.02	My research motivation.....	55
3.03	Methodology and paradigm.....	57
3.04	My role as insider researcher.....	61
3.05	Exploring case study .....	63
3.06	Reflecting on the pilot.....	65
3.07	An emergent NI approach.....	66
3.08	Participant choice for interviews.....	69
3.09	Negotiating the research cul-de-sac.....	74
3.10	Research epiphany .....	79
3.11	Final data handling approach.....	82
3.12	Ethics, credibility and rigour .....	86
3.13	Conclusion.....	91
<b>Chapter Four: Findings.....</b>		<b>93</b>
4.0	Introduction.....	93
4.1	<i>Phase One: Blended Learning (2008–09)</i> .....	97
4.1.1	Suspicion arising from lack of evidence.....	98
4.1.2	Cynicism fuelled by the ulterior motive of efficiency over academic practice.....	100

4.1.3	Displacement due to lack of consultation.....	102
4.1.4	Resistance due to Ed Tech challenging academic practice .....	104
4.1.5	Concerns over lecturer and student wellbeing due to ‘invasive’ Ed Tech.....	107
4.1.6	Blended Learning findings.....	110
4.2	<i>Phase Two: VLE Review (2010-12)</i> .....	112
4.2.1	Protectionism towards existing technology.....	114
4.2.2	Lack of confidence in internal Ed Tech leadership.....	116
4.2.3	Distaste towards neoliberalism rooted procurement .....	119
4.2.4	VLE Review findings.....	120
4.3	<i>Phase Three: Digital Campus (2015 onwards)</i> .....	122
4.3.1	Apprehension due to Ed Tech change legacy.....	124
4.3.2	Aversion towards the unknown.....	125
4.3.3	Expressing hope and optimism.....	127
4.3.4	Digital Campus findings.....	129
4.4	Conclusion of findings.....	131
<b>Chapter Five: Discussion.....</b>		<b>134</b>
5.01	Introduction.....	134
5.02	The importance of values.....	135
5.03	Educational Technology values.....	136
5.04	A public sphere.....	140
5.05	The HEI sphere.....	144
5.06	Applying values in the sphere.....	146
5.07	Technology circle.....	149
5.08	Steering committee.....	151
5.09	Recommendations for practice.....	155

5.10	Research contribution.....	157
5.11	Limitations of the research.....	159
5.12	Conclusion.....	160

## **Chapter Six: Conclusion.....162**

6.1	Research questions.....	162
6.2	Impact of the research.....	164
6.3	Recommendations for further research.....	167

## **References.....170**

## **Appendices.....203**

A – Research questions.....	204
B – Pilot questionnaire findings.....	205
C – Participants.....	214
D – Interview questions.....	219
E – Interview prompts.....	222
F – Coding and analysis.....	228
G – Ethical approval.....	230
H – Participant consent form.....	234

## **List of Tables**

Table 1 – Selected examples of terms related to Educational Technology.....	17
Table 2 – Participant choices over three interview rounds.....	77
Table 3 – Basic participant biographies and themes of each Ed Tech phase.....	96
Table 4 – Educational Technology pathologies and their corollary values.....	139
Table 5 – Approaching a model for HEI meetings via the ideal speech situation...	148
Table 6 – How a steering committee might implement a technology circle.....	154

## Acknowledgements

I would like to express my sincere gratitude to my supervisory team (Dr Andrew Cramp, Professor Christine Hockings, Professor Michael Jopling) for their momentous guidance throughout my research journey. I did not make things easy for them, but they retained a level of belief in me that I will cherish forever. They are a credit to research, goodwill and my sanity.

I would also like to thank my research participants who, right up to the point of submission, remained committed to helping with my thesis. My research was only possible because of their selfless contribution and I thank them all for their collegiality, encouragement and engaging perceptions.

Without hesitation I dedicate this thesis to my wonderful family. You provided a level of patience and kind support that I could only dream of and I feel truly blessed to have you in my life. You helped in ways that you will never realise, and I am way beyond grateful. Thank you from the bottom of my indebted heart.

# Chapter One: Introduction

This chapter provides a context for this inquiry and provides a rationale for the research questions. The scope of the research will be addressed before outlining the structure and organisation of the thesis. This thesis is written from my own perspective and consciously uses the 'I' pronoun where relevant because my epistemology (see research design) does not recognise the objectivity that some third person written discourse aspires to. There are times when I employ self-reflexivity (Etherington 2004) to illuminate the research design, methodology, data collection and analysis since I maintain that 'The researcher's experience is [...] important to how it illuminates the culture under study' (Ellis 2004, 47). In addition, reflexivity potentially 'allows one to "defamiliarize" oneself with prevailing assumptions and routines in order to examine them anew' (Wells 2011, 119) I believe that the process of doing so might facilitate a different and illuminating perspective on my research.

## 1.1 Context

There are several definitions for what can be described as the application of devices or tools for the provision or receipt of systematic instruction: e-Learning, Technology Supported Learning (TSL), Digitally Mediated Learning (DML), Online Learning, Technology Enhanced Learning (TEL). I prefer the simplified term 'Educational Technology' (or Ed Tech) because I believe it encapsulates more accurately that technology which can be used and appropriated to support a Higher Education Institution (HEI) but may not be intended for student instruction (e.g. online



administrative portals or 'apps' for remote access to registry). Given the more recent models for Ed Tech change covered in the literature review, student instruction is just *one* of several justifications for using Ed Tech in the HEI. See section 2.1.1 of the literature review for a more detailed consideration of Ed Tech terminology.

The setting of this research is a post-1992 university that, at the time of writing, is seeking to regain the reputation it once held as a leader in digital Ed Tech innovation. The timescale for the literature review starts from the mid-1990s, around the time when the proliferation of the worldwide web enabled more widespread technological networking and HEIs in the UK began to offer campus-based internet access to their students. However, data collection was focused on academic perceptions of the last decade of Ed Tech implementation, broadly reflecting the period when my doctoral research began. In addition, the increased use of Ed Tech in the HEI was the most conspicuous of several changes from the mid-1990s (Brown & Carasso 2013; Laurillard 2008; Molesworth *et al.* 2010) and has continued to remain an important concern for the modern HEI, as Pates & Sumner (2016, 159) have asserted:

Higher education in the developed world is arguably undergoing one of the most profoundly turbulent set of challenges in living memory. Global economic, technological and pedagogical currents are interweaving to produce paradigmatic changes that challenge many of the traditional practices and environments of higher education institutions (HEIs).

This inquiry emerged originally from my professional experiences as a Senior Lecturer experimenting with Ed Tech implementation for my own subject teaching. As my role broadened to assisting colleagues outside my subject area, I began to experience resistance to my Ed Tech enthusiasm from some colleagues. After

embarking on a period of internal research projects to explore ways in which we might identify and remove barriers to staff adoption of Ed Tech, I discovered that these barriers were complex, well-embedded and not readily articulated by academic staff (Selwyn 2011).

## 1.2 Thesis aims

I wanted to understand the complex relationships that academic staff had with Ed Tech because I was fundamentally passionate about the transformative potential of using Ed Tech in higher education and wanted to improve this practice. I did not intend to be unduly critical of prevailing HEI practice but wished to encourage more robust scrutiny of HEI Ed Tech implementation and to represent the opinions of those who are tasked with the implementing and embedding of Ed Tech. As an academic member of staff, I had experienced my own relationship with Ed Tech transform over time and I wanted to see if this represented a wider trend in the host HEI by examining academic perceptions of Ed Tech. As an insider researching my own institution, I felt that academic staff were important stakeholders for technology-led instruction with a level of expertise that appeared to be too readily overlooked during periods of change (Thomson 2013).

In short, I believed that a richer exchange (i.e. communicative rationality – see 2.2.4) between academics and those that strategically drive Ed Tech procurement and implementation would benefit the whole organisation. As such, I wanted to see how the academic voice (see literature review, 2.1.7) could be more appropriately incorporated into Ed Tech-related change in the HEI. Therefore, my aims were to

see how the role of Ed Tech had evolved in the modern HEI, gather academic perceptions of this evolving role for Ed Tech, and ultimately see how these perceptions might be operationalised towards intersubjectively agreed consensus around Ed Tech implementation and change. Whilst the findings may not necessarily be representative of other HEIs, with further research there could still be implications for other HEIs, as identified in the conclusion (sections 6.2 and 6.3).

### 1.3 Research questions and rationale for study

As suggested in the literature review to follow, Ed Tech was introduced to HEIs as part of the wider societal trend for technological transformation but also for specific administrative and strategic purposes (Feenberg 1999; Levidow 2002). I wanted to understand the drivers for adopting Ed Tech in the HEI to see if this had a consequential impact upon the perception and use of Ed Tech (Agre 2002; Facer 2011; Jochems *et al.* 2003). Finally, I wanted to see if there was a way to embrace academic perceptions to influence future implementation of Ed Tech in the HEI.

Accordingly, the research questions (RQs) for my inquiry became:

RQ1: How has the role of Educational Technology developed in the post-1992 HEI?  
RQ2: How do academics articulate their perceptions of Educational Technology implementation in the post-1992 HEI?  
RQ3: How might academic perceptions be used to influence implementation of HEI Educational Technology?

See Appendix A for full details of research questions and sub-questions. With so many forces at play in the modern HEI, why was Ed Tech prioritised for such inquiry? In short, I believed that unfettered Ed Tech proliferation was being appropriated by HEIs as inexorable progress, despite there being little solid evidence

of the learning and teaching impact of Ed Tech (literature review 2.1.2). One aim of the literature review is to explore non-pedagogic reasons why Ed Tech may have flourished in the HEI in relation to RQ1.

## 1.4 Organisation of thesis

The literature review is in two parts. The first part considers the rationale for using Ed Tech in the post-1992 HEI before considering the connection between Ed Tech research trends and technological rationality. These ideas are then linked to the eclectic expectations of the modern HEI. The future possibilities for Ed Tech, informed by the intersubjective academic voice, are then explored as a potential forum for ongoing change. Part two develops a Habermasian conceptual framework by explicating some of the trends from part one as examples of lifeworld colonisation in the HEI (see 2.2.3 below). Literature-informed suggestions for decolonising the lifeworld are then addressed (see 2.2.7 below), before a research gap is identified and alternatives to Habermas are acknowledged. Ultimately, part two of the literature review provides a methodological link to the subsequent research design chapter.

The reflexive research design chronicles my journey as researcher, professional and colleague. I adopted an open and emergent narrative research design that embraced several critical incidents – allowing me to adopt a more enlightened and iterative approach to data collection and analysis. The findings chapter presents a case study of academic perceptions in three phases of Ed Tech change and broadly aggregates the most prevalent or pertinent themes. It then discusses the predominantly critical participant perceptions as examples of Habermasian pathologies (see 2.2.6 below).

There are also times when I embrace reflexive discussion when addressing the influence of my evolving positionality alongside the research journey.

The discussion chapter builds upon the pathologies in the findings and inverts them into the values that arguably underpin them. As will become clear, such values are rarely articulated openly yet are important to the lifeworld of participants. The discussion articulates a practical approach to implementing a values-informed technology circle as a public sphere-inspired mechanism for intersubjective consensus. The intention is to operationalise communicative rationality: a key attribute of undistorted discourse advocated by Habermas. The conclusion then summarises the key points of the thesis, addresses the research questions and explains how the gap in knowledge has been addressed. It also considers the impact of the research and reflects upon what I learned as a researcher during the process. The recommendations chapter then offers pragmatic advice for implementing a public sphere in the HEI before suggesting opportunities for further research and investigation based upon the limitations identified in the discussion.

## **1.5 Scope and disclaimer**

With such a restrictive word limit, there are inevitable constraints upon what can be realistically covered. Originally, pedagogy was a major concern of my inquiry, but early data collection did not focus on this as expected so I concentrated upon investigating HEI leadership, change and technology instead because participants covered these matters in detail. Also, whilst my research relates to improving the HEI relationship with Ed Tech, from which students ultimately benefit, students' opinions

are not the focus of this inquiry. This is partly since mechanisms to accommodate the student voice are now relatively commonplace (e.g. National Student Survey, Teaching Excellence Framework metrics), compared to less prevalent formal mechanisms to capture the academic voice. More importantly, I believe that academics are the interface for the majority of HEI stakeholders since they usually interact with most areas of the organisation as part of their practice.

As a disclaimer, some of the participants' perceptions were really quite contentious and controversial, hence the anonymity afforded to them. Many of the harsher opinions were not included for ethical, privacy and legal reasons. Some perceptions were later revoked (or censored) by the participants themselves and other perceptions became obsolete or ameliorated due to subsequent organisational developments. Epistemologically, I believe individual perceptions are the way in which participants introspectively and cognitively process and express their experiences, but shared perceptions can also represent the intersubjectively agreed voice of a group of people. So, perceptions can have resonance, but they don't represent empirical reality (see 3.03) and some turned out to be quite incorrect.

In short, I believe that we cannot comprehend participants' experiences directly, we can only interpret their interpersonal expressions of an original introspective phenomenon – a double hermeneutic during data collection that becomes a triple hermeneutic during data analysis. I believe it is the responsibility of robust research to embrace and understand perceptions, however unpalatable, towards organisation improvement. This is because I believe that such perceptions represent the social reality of a group of people that might have wider implications beyond that group.

# Chapter Two: Literature Review

## 2.0 Introduction

This literature review is in two parts and is integrative in approach. Part one provides the foundations for part two and the chapter concludes by outlining a gap in knowledge to be addressed by investigating the research questions. It begins by considering the rationale for using Ed Tech in the HEI before considering contemporary Ed Tech research trends. Technological rationality is then explored as a prevalent justification for Ed Tech implementation, in relation to the wider marketisation agenda in HE. After this, social determinism is considered as an alternative approach to Ed Tech implementation. Part two considers how a Habermasian conceptual framework can assist our understanding of the drivers and trends addressed in part one before providing a conceptual link to the methodology chapter. Whilst the literature provides a context for all research questions, illuminating RQ1: 'How has the role of Educational Technology developed in the post-1992 HEI?' is the primary focus here. In part one, the development of Educational Technology in the HEI is seen as determined by a combination of factors and part two considers how Educational Technology in the HEI might now be influenced by a Habermasian inspired leadership approach.

## ***2.1 Part One – Educational Technology***

### **2.1.1 Defining Educational Technology**

As alluded to in section 1.1 of the introduction there are a wide range of nebulous and sometimes conflicting terms that can be accommodated under the umbrella term Educational Technology. In a research article investigating the use of Ed Tech to support learning, Jack and Higgins (2018,3) declare that 'It is not possible to find a consistent definition of educational technology or a consensus on what terms to use'. As shown in the table below, the meaning of Educational Technology can range from the technological tools and media intended for learning and teaching to student management systems and data storage for analysis (i.e. administrative activities that are not student facing). Ed Tech can also refer to an organised academic discipline that investigates the practice of technology, as when subjects like ICT are taught in schools.



**Table 1. Selected examples of terms related to Educational Technology**

<b>Term (common use)</b>	<b>Description (common use)</b>
Digital Technology	Modern, specifically digital, forms of technology (as opposed to analogue forms)
Digitally Mediated Learning (DML)	Learning that is influenced in some way by digital forms of media
E-Learning	Learning conducted via electronic means, usually online
Education Management Information Systems (EMIS)	Tools for student and curriculum management and administration
Information and Communications Technology (ICT)	An extension of IT (above) to include telecommunications and other communication
Information Technology (IT)	The study or use of systems for storing, retrieving and sending information
Learning Management Systems (LMS)	A Virtual Learning Environment (VLE) and tools to support it
Learning Record Store (LRS)	Back office management and data storage often required for inspection or analysis
Mobile Technology	Technology associated with cellular communication devices (e.g. mobile phones)
Online Learning	Usually internet-based learning activities, esp. when participants are physically apart
Technology Enhanced Learning (TEL)	Often a synonym for E-Learning, but can be about learning <i>with</i> technology not through it
Technology Supported Learning (TSL)	Learning and teaching supported in some way by (normally digital) technology

Historical developments have informed our understanding of Educational Technology. Over four decades ago Duncan & McAleese (1978) suggested that Educational Technology is both highly practice based and complexly theoretical as an academic pursuit. In a paper tracing development in instructional technology research, Ely (2008, 244) suggests that the field of Educational Technology has undergone 'minor paradigm shifts more common to the social sciences than the natural or biological sciences'. Some explore the concept of Educational Technology etymologically as two separate terms (Selwyn 2011), while others consider it to be the linguistic intersection of 'education' and 'technology' (Spector 2011).

One broad definition of Educational Technology is technology that is intended to improve both the environmental and cognitive aspects of learning and teaching. The tools through which this is achieved are sometimes labelled as IT, ICT, mobile platforms and digital technology (as seen in Table 1) but the purposeful application of these tools in an educational context can also constitute Educational Technology. In more recent understandings of technology in education, Spector (2016, 10) offers a pedagogic focus: 'educational technology involves the disciplined application of knowledge for the purpose of improving learning, instruction and/or performance'. Similarly, within a practitioner focused text book, Newby *et al.* (2011, 9) argue that 'Educational technology utilizes application tools to accomplish the overall goal of constructing and delivering optimal learning experiences'. In addition, Reeves & Oh (2017, 325) argue that 'Few useful distinctions exist between educational technology and instructional technology with respect to the types of research conducted under these labels.' These ideas collectively focus upon the learning aspect of Ed Tech, but there is more to the definition.

The meaning of Ed Tech can be understood in relation to the socio-organisational dimension of Ed Tech management. Selwyn (2011, 6) manoeuvres the definition of Ed Tech into the socio-political realm by suggesting that technology 'is understood as the process by which humans modify nature to meet their needs and wants'. In a volume dedicated to defining Ed Tech, Januszewski & Molenda (2007, 1) focus throughout on the idea that 'Educational technology is the study and ethical practice of facilitating, learning and improving performance by creating, using, and managing appropriate technological processes and resources'. This research combines both these citations for a working definition: Educational Technology is the study and ethics of *managing* technological tools within an educational context to ultimately facilitate learning.

### 2.1.2 Exploring the rationale for using Ed Tech in the modern HEI

Some of the main drivers for using Ed Tech in the HEI have been prevailing assumptions of its potential for improvement in learning and teaching. However, critiquing how effective technology might be for pedagogy, Loveless & Williamson (2013, 108) agree that 'Evidence of direct causal links between using digital technologies and improvements in measures of learning is notoriously difficult to demonstrate'. Perhaps this apparent lack of evidence is why sometimes 'it is *presumed* [my emphasis] that technology will lead to significant changes in educational arrangements and outcomes' (Selwyn 2016, 439). Consolidating research evidence for a link between technology and teaching more recently, Luckin (2018, 1) believes 'there is no existing organization or publication that specifically

targets the evidence related to learning and teaching with technology' in the way that she attempts in her volume.

There is a belief in some literature that, despite its prevalence, Ed Tech has not innovated learning and teaching practice as expected. In a case study of learning through games, Amory (2010) suggests that much Ed Tech predominantly replicates traditional ideas of instruction rather than innovating pedagogically. This is supported by a Higher Education Policy Institute (HEPI) report (Davies *et al.* 2017, 11) which suggests that 'Learning and teaching practices within higher education have changed surprisingly little over the last 20 years... Pockets of innovation are found in almost every institution, but few have fundamentally changed how they teach'. As part of a critical examination of pedagogy in a digital age, Oliver *et al.* (2013, 102) believe that this lack of innovation is a failing in the design of Ed Tech itself since 'many technology supports and templates can encourage the use of more conventional, structured and linear approaches'. In a study aiming to integrate HEI pedagogy with policy, McNaught (2006, 114) accepts that technological enhancements tend to replicate conventional teaching because: 'The learning process is not different (after all, students are still people with the same neural pathways)'. These ideas also challenge the tech-optimist discourse addressed in section 2.1.3 below.

There remains hope, however, that teaching might still be transformable through Ed Tech. Whilst a QAA commissioned report on supporting technology enhanced learning agrees that 'teaching with technology does not always transform learning' (Austen *et al.* 2016, 2) it maintains later that 'Institutions should horizon-scan

emerging technologies and new pedagogical ideas and consider their integrated application for developing teaching excellence' (Austen *et al.* 2016, 3). This provides a measured view of the pedagogic potential of technology but retains hope that technology might still become innovative. However, according to Loveless & Williamson (2013, 101) 'Digital technologies don't bring about transformation in learning and teaching; change is brought about or constrained by people enacting their theories of learning and engaging in their politics of purpose in education'. In other words, technological solutions by themselves may not transform learning, though what they can *provide* might – it is how these tools are thought about and used that might be important.

Another driver for Educational Technology in the HEI has been student support and expectations. Researching the impact of digital transformation in one HEI, Adekola *et al.* (2017, 1) believe that shifting student expectations 'has led many universities around the world to explore blended learning recently', implying a student-led rationale for Ed Tech adoption. Jisc (formerly JISC - Joint Information Systems Committee) corroborate this idea: 'When students enter HE they already have reasonably clear expectations of what technologies they are entitled to' (White 2014). In a guide aimed at embedding blended learning in the HEI, Jisc (2017) also claim that innovation in Ed Tech has profoundly changed access for students with special needs, allowed for flexible approaches to learning for part-time students, changed multi-platform learning by embracing students' own devices and provided more alignment with their social world. Whilst Ed Tech may not have been as pedagogically transformative as some might have hoped, many suggest that it never needed to be if seen in relation to other worthwhile potential affordances.

### 2.1.3 Tech-positive research trends as justification for Ed Tech

One of the drivers for justifying Ed Tech usage in the HEI might be the tech-positive research trends that have developed concurrently alongside the historical growth of Ed Tech in the HEI. One trend within Ed Tech research is to focus on obstacles, self-efficacy and practitioner reluctance towards tech that 'usually reaches conclusions that recommend the overcoming of "barriers" or impediments within the immediate educational context' (Selwyn 2011, 34). Such research usually concludes with recommendations to encourage wider engagement with Ed Tech. For example, Birch & Burnett (2009, 131) identify several individual, institutional and pedagogic barriers to adoption that result in what they call 'slow diffusion'. They conclude with suggestions for clearer organisational strategy, access to mentors, pedagogic advice and support for practitioners. These research trends tend to assume that Ed Tech practice is inherently and inevitably positive when implemented diligently.

There is an abundance of historical research advocating the adoption of Ed Tech within which practitioner resistance to technology is deemed an aberration. In a comprehensive review of research within a school context, Mumtaz (2000) reported on the literature related to practising teachers' uptake of ICT within schools, and found that teachers' fundamental beliefs about learning and teaching are linked to the level of IT they adopt. The article addresses factors as to why teachers resist computer use in teaching (e.g. lack of experience, support, specialist help, availability, time and financial support). Mumtaz (2000) cited Evans-Andris (1995) whose 8-year study identifies three styles of computer assimilation amongst teaching

professionals: avoidance, adoption and technical specialisation – with avoidance being the dominant trend identified. Within these discourses, resistance is presented as unwelcome, unjustifiable and detrimental to technological progress rather than as fertile ground for critical exploration, as will be seen in the discussion chapter.

Reviewing a variety of official reports and research studies, Reynolds *et al.* (2003) analysed the prevalence of what they call optimist-rhetoric research around student attainment – which they suggest is perpetuated by government agencies, politicians, and the media. They balance this view with their concept of pessimist-rhetoric and the input of academic researchers, whose ‘implicit research findings are beginning to jar harshly with the optimist-rhetoricians [*sic*] assumptions and beliefs about the value and role of ICT in the classroom’ (2003, 155). Reynolds *et al.* (2003, 167) concluded that there is ‘a pressing need to subject the optimist-rhetoric to the objective examination of academic research’, though the suggestion that objective academic research exists might be considered optimistic itself. Overall, Reynolds *et al.* (2003) provide a useful critique of those who too readily endorse the application of technology in learning, offering a noteworthy early example of pessimism towards Ed Tech in the HEI.

More recently there have been examples of researchers attempting to understand practitioner perceptions in a more nuanced way, using increasingly quantitative research designs. Mama & Hennessey (2010) suggest that teachers’ perceptions might influence integration of IT and subsequent student engagement. Taking three case studies of teachers with low, medium and high levels of ICT integration into their teaching practice, they suggest that practitioner *beliefs* around the benefits of

technology ultimately influence how much ICT they incorporate. Whilst this may be unsurprising, the study remains sanguine about the pedagogic affordances of Ed Tech, seeing negative practitioner beliefs as unhelpful barriers. The underlying assumption remains that high levels of adoption are to be favoured and I would argue that levels of integration are likely to be much more complex than the categories of 'low', 'medium' or 'high' featured here.

Fu (2013) represents a more recent literature review of journals related to ICT in education. Once again, the author remains convinced of the merits of technological solutions and there is little critique of the underlying technology itself. To be clear, this does not mean that tech-positive rhetoric is misplaced: 'Pessimists do not deny the existence of "progress" in certain areas...' (Dienstag 2006, 25). However, optimistic opinions of Ed Tech too readily tend to assume that tech-led educational change represents unequivocally positive progress, which is not necessarily true.

#### **2.1.4 Prevalence of technological rationality as driver for Ed Tech**

The enduring underlying confidence in the transformative potential of technology might explain the preference for uncritical adoption of Ed Tech in the HEI.

Technological rationality is the idea that technological advances, once ubiquitous, can alter what might be considered rational thereafter: faster broadband access was followed by wireless access, which enabled more portable devices to flourish, the streamlining of which was linked to improvements in cloud storage. Models such as the Technology Acceptance Model (TAM), Innovation Diffusion Theory (IDT), Technological Pedagogical and Content Knowledge (TPACK) and the Blended



Learning Adoption Framework (BLAF) all share the assumption that adopting Ed Tech is inherently progressive. Exploring a framework for blended learning in HEIs, Adekola *et al.* (2017, 9) believe that ‘technology is often viewed as the solution to an undefined “problem” and so concentrating on student learning remains paramount’. This view alludes to the notion of technology for technology’s sake and implies instead that learning and teaching should instead be a key driver for Ed Tech.

Some believe Ed Tech leadership and implementation in the HEI has a propensity to be hegemonic and partisan. Njenga & Fourie (2010, 209) argue that ‘Technology is just a medium, a means to achieve *something* [my emphasis] and not an end in itself’. For some, that ‘something’ might be improved learning and teaching, for others it might be better organisational efficiency. This ideological potential of Ed Tech is problematised by several sources. Huws (2014) believes that technological rationality proliferates by stealth and Facer (2011, 3) is concerned that ‘this highly partial view of the future is presented as an inevitability, as uncontestable, as unchangeable [...] a predetermined landscape to which everyone must adapt’. Kukulska-Hulme & Traxler (2013, 244) argue that educational institutions ‘may attempt to overwrite the ideology designed into them’, again alluding to the possibility of inherent agendas. This potentially ideological rationality is a perennial concern in the philosophical work of Ihde (1990), the political discourse of Feenberg (1999) and the socio-economic consideration of tech by Levidow (2002).

Fundamentally, the potential for technological rationality to be both autonomous and hegemonic represents a vital motivation for this study. The implication is that technological normalisation becomes its *own* catalyst for further technological

proliferation, akin to the operation of the systemworld (see 2.2.2). In this sense, the HEI might even be an unwitting ally of the ideological state apparatus (Althusser 1971) whereby the dominant ideology controls via subtle and imperceptible persuasion rather than direct and overt repression.

#### 2.1.5 Multifarious expectations of the modern HEI

There are several expectations of the HEI, which might have a bearing upon the way in which Ed Tech has been (or could be) strategically managed. The management of the contemporary HEI 'reflects the anxiety of the public-sector policy-makers to make education work better' (Laurillard 2008, 24-25) in relation to quality of provision as well as the economic viability of this provision. Whilst rooted in a nostalgic desire for the past, in *Everything for Sale?*, Brown & Carasso (2013) argue that the steering power of the market has become the dominant force in shaping Ed Tech proliferation. This is exemplified in the demise of an influential government technology agency, Becta (formerly British Educational Communications and Technology Agency), to save costs in 2011. The ensuing power of market forces in the HEI is explored by Molesworth *et al.* (2010) in *The Marketisation of Higher Education*, a collection of chapters from leading figures in higher education.

The precise nature of the UK HEI is, and always has been, in flux as a contested 'multiversity' (Holmwood 2011) with a variety of remits and expectations from various stakeholders. For example, in a critical examination of universities, Hussey & Smith (2010, 134) identify six disparate obligations for HEIs that are expected to: enable individuals to flourish, further societal interests, preserve and promote freedoms,

create new ideas and processes, be a repository for knowledge and skills and act as gatekeeper to the professions. Collini (2012) suggests that the modern university provides some post-secondary education for the public good, furthers some form of advanced research and scholarship, is multidisciplinary and has some form of intellectual autonomy. Fundamentally, these ideas represent a lot of different remits and expectations to manage effectively in the HEI, so any recommendations for practice might need to recognise this complexity.

Given these pressures, academic beliefs about the intellectual operations of the modern HEI may be somewhat utopian in the context of an encroaching neo-liberal ethos. In his capacity as president of Universities UK, Professor Steve Smith oversaw 'a radical shift that is driven by a clear political aim: to introduce more market incentives into the system ... [which] mean that universities have to be clear about what we offer' (Smith 2011, 135). Declaring student interests as one rationale, Smith (2011, 131) explains that 'We tailored a narrative that did not start with the universities and what might be good for them, but with the economy, and specifically with the best strategy to ensure future economic growth'. As such, the multiple pressures upon the modern HEI may now be less important than this so-called radical shift and need for economic growth.

Considering the ideas around technological rationality, technological positivism and concerns over the marketisation of HE, there may well be some connection between all three of the trends. In a critique of entrepreneurial universities, Slaughter & Rhoades (2009) coin the term 'academic capitalism' for those HEIs that 'have taken on the ethos of a business, the primary purpose of which is to stay profitable'

(Hussey & Smith 2010, 107). Marketisation and tech positive trends might even catalyse further technological rationality according to Fleming (2008, 7):

Under this threat from the impact of the economy, HE is in danger of becoming uncritical in its acceptance of technology and technical [*sic*] rationality as ways of perceiving all problems as amenable to technical solutions.

If the HEI is considered by some academics to be a space of betterment and democracy, then encroaching economic determinism may be anathematic to this. In his capacity as IT industry analyst, Krigsman (2014) explains that nowadays 'IT is not just a service provider; IT today is a broker and partner' with many HEIs improving their physical technology infrastructure to facilitate this route. Alongside this there a growing number of entrepreneurial Ed Tech providers looking to gain commercially from such HEI partnerships. This view implies a catalysing link between Ed Tech and commodification that is verified by the increasing HEI trend for outsourcing the facilitating of Ed Tech to external commercial providers. If Ed Tech in the HEI is unduly influenced by the expectations discussed here, then how might an alternative be envisaged? The remainder of the literature review considers alternatives in relation to sub-question RQ1b 'What forms of Ed Tech implementation are available to the HEI?' and RQ1c 'What other ways are there for leading on Ed Tech change?' (see Appendix A for all research sub-questions).

#### **2.1.6 Social determinism as alternative**

There is a body of literature that advocates the importance of socio-deterministic approaches to Ed Tech implementation and change, which could be a useful way of

considering RQ1b and RQ1c outlined above for ‘a more socially circumspect analysis of education and technology’ (Selwyn 2011, 32). The guiding principle of SCOT (Social Construction of Technology, originally Pinch & Bijker 1984) was that human actions should have a stronger influence in shaping our relationship with technology, the exploration of which is the focus of this section. The overall suggestion here might be that the procurement and implementation of Ed Tech could benefit from a more balanced organisational approach to endorsing Ed Tech that embraces both social and technological determinism, which is a crucial foundation to part two of the literature review below (section 2.2).

Whilst Collini (2012, 15) believes that ‘it is hard to see how the use of “technology” in teaching could be seen as anything other than a neutral adoption of the inventions available in the wider society’, Loveless & Williamson (2013) contend that technology and education are ‘socio-technical’ whereby technology and society are mutually constitutive due to a changing ‘multiplicity of heterogeneous shaping factors’ (ibid 2013, 6). In a historical study of e-learning integration in HE, Jochems *et al.* (2003, 7) argued that for Ed Tech to succeed ‘organizational, pedagogical and technological aspects have to be managed in harmony in order to solve an educational problem adequately’. More recently, Adekola *et al.* (2017, 8) suggest there are a total of six different factors to consider when implementing blended learning: culture, ethics, infrastructure, management, pedagogy and support. This is probably why Andrews & Haythornthwaite (2007) argue that previous management-led efforts to find the best ‘task-technology fit’ for the task at hand is deemed flawed because it assumes relatively identifiable and stable social and technical conditions.

### 2.1.7 The critical academic voice

The academic voice may be both critical in strategic importance and adversarial in practice; it is the former idea that will be focused on in this literature review and the latter idea that is covered in the findings in relation to RQ2. Voice is considered as 'an opportunity to express opinions, access to events and people to influence decisions' (Thomson 2013, 79) but there is much more complexity to the term.

A consistent deficiency in much research on Ed Tech is that it rarely involves the voice of the teaching professionals who are ultimately expected to implement it. Selwyn (2011, 177) asserts that 'many of the dominant academic understandings of education and technology are notable for their lack of consideration for the "voice" of the learner, the teacher or the educational institution'. In a study exploring the digital transformation potential of technology, Laurillard (2008, 24) believes academic participation in decision-making is important because 'Nowhere is the teaching professional in the driving seat' and doing this might 'help to make teaching professionals themselves the agents of change' (2008, 27). According to Thomson's views on voice in education, active participation is important because 'Reaching that utopian state is understood as a struggle to be heard, listened to and taken seriously' (Thomson 2013, 79). Taken together, these ideas suggest that voice can be connected to influencing change in some way, but the dominant discourses of Ed Tech research tend to overlook such a voice. Glover (2004, 67) sees voice as an opportunity to embrace alternative perspectives and argues that the researcher should 'seek out and give voice to these counternarratives, narratives that represent alternative realities and important perspectives on the associations studied'.

Offering the platform for a voice alone might not be enough if ‘Education and technology is simply not a topic that many people talk openly about, let alone get impassioned or angry about’ (Selwyn’s 2011, 179). In addition, Thomson (2013, 83) argues that stakeholders ‘are often asked their opinions but their recommendations are acted on in a patchy fashion. It is as if the act of speaking is all that matters.’. What these ideas suggest is that robust organisational mechanisms may be required in the HEI for encouraging, acquiring and operationalising the academic voice beyond ‘simply a matter of technological implementation following policy mandate from the political centre of authority’ (Loveless & Williamson 2013, 9). The following section focuses on how Ed Tech leadership might be improved, in relation to RQ1c, towards what Davies *et al.* (2017, 45) call ‘strong digital leadership [that is] led at senior levels within the institution’ to improve Ed Tech developments.

### 2.1.8 Evolving Ed Tech leadership

There are several broad approaches to leadership and management which could influence the way in which HEIs might accommodate the voice of academics. As a basic taxonomy through which to consider leadership, Bush (2011) synthesises several leadership and management approaches in school and college education and offers six broad types: formal, political, collegial, cultural, subjective and ambiguity. Bush (2011, 40) explains that ‘Formal models assume that organizations are hierarchical systems in which managers use rational means to pursue agreed goals’ whereas ‘Political models assume that in organizations, policy and decisions emerge through a process of negotiation and bargaining. Interest groups develop

and form alliances in pursuit of particular policy objectives' (Bush 2011, 99). Bush (2011, 72) also states that 'Collegial models assume that organizations determine policy and make decisions through a process of discussion leading to consensus' (akin to communicative rationality, section 2.2.4) and 'Cultural models assume that beliefs, values and ideology are at the heart of organizations' (Bush 2011, 170). Finally, Bush (2011, 126) explains that 'Subjective models assume that organisations are the creations of the people within them' and 'Ambiguity models assume that turbulence and unpredictability are dominant features of organisations' (Bush 2011, 147). I believe this taxonomy is applicable to the HEI since the descriptors do not specify any particular organisation and the subsequent data findings corroborate potentially formal, political and collegial changes in this HEI.

Some literature suggests that a collegial and distributed approach to Ed Tech change might represent a useful way to lead on Ed Tech implementation in the HEI (RQ1c). In their critical discussion of Ed Tech leadership, Shurville *et al.* (2010) advocate the role of a single Senior Academic Technology Officer (SATO) to lead on Ed Tech change. However, others suggest a more collegial approach to HEI leadership – possibly since 'We have come a long way since technology in universities was the sole domain of IT managers' (Davies *et al.* 2017, 45). Examining different perspectives of distributed leadership, Hargreaves and Fink (2009, 185) agree that singular leadership is naïve because 'in a complex, fast paced world, leadership cannot rest on the shoulders of the few'. Collegial leadership is an approach that might allow for more shared decision-making around Ed Tech in the HEI. Bush (2011, 59) believes that 'it is now a truism that staff must "own" decisions if they are to be implemented successfully' and academic input may provide 'an



authority of expertise that contrasts with the positional authority associated with formal models' (Bush 2011, 74).

Some literature supports the idea that more hybrid forms of leadership that combine established approaches might be an appropriate way to lead on Ed Tech change (RQ1c). In their examination of the role of the Associate Dean in HE, Floyd & Preston (2018, 928) argue that many view distributed leadership 'as a panacea for the complexities of modern times, there are others who perceive it pejoratively and take a more critical stance'. With reference to schools, Gronn's (2010, 70) volume on educational leadership sees hybrid leadership as a combination of 'heroic and distributed' forms of leadership that carefully amalgamate singular and shared leadership approaches. Gronn (2010, 83) also advocates the 'dynamism of leadership configurations' in hybrid leadership that features 'individual leaders, plural-member leadership units and networks' (2010, 82).

These management configurations rely upon various networks of personnel to lead on change perhaps because 'there is no right way to do leadership [...] leaders will do whatever is required to get the job done' (Gronn 2010, 80). The idea that formal leadership might work effectively in conjunction with distributed leadership is corroborated by Harris (2010, 66): 'In short, distributed leadership necessitates some formal direction and orchestration'. In an article on blended leadership, Collinson and Collinson (2007, 377) found that teachers themselves 'wanted to be consulted and listened to, but they also valued clear and consistent guidance and direction from those in leadership positions'. These ideas problematise the notion that one leadership approach can work in isolation.

Whilst the ideas of Gronn (2010), Harris (2010) and Collinson & Collinson (2007) originate from a non-HE context, there are sound reasons for them to be relevant in the HEI. In a report on collective leadership for the *Leadership Foundation for Higher Education*, Petrov *et al.* (2008, 4) believe that several HEIs are trying to ‘achieve a better balance between the needs of managerialism and collegiality’ possibly since ‘the discourses and practices of managerialism often sit uncomfortably amidst the more traditional values of academia’ (Preston & Price 2012, 410). This hybrid leadership may help to address what Hodgkinson (1993) once called the ‘unbridgeable divide’ between distributed and formal models of leadership, and one way of improving this divide is developed within the discussion chapter.

Having stressed the importance of amalgamating disparate approaches to leadership, Petrov *et al.* (2008, 41) also suggest that academics seek ‘a formal leader and leadership team who can provide a clear vision and direction’. This implies at least *some* rationale for retaining the influence of formal leadership in the HEI because neither a ‘top-down’ nor a ‘bottom-up’ approach to change would suffice in isolation. If students now bring their own devices, expectations and even virtual social networks to the HEI (Traxler 2010), then it loses even more organisational control over how HEI digital culture might develop. It might therefore be more important to consider the best way to accommodate unknown future Ed Tech developments in the HEI, as some of part two will attempt to explore.

## 2.2 Part Two – Applying Habermas

### 2.2.1 The influence of Habermas

The themes of part one (i.e. tech-positivism, tech-rationality, external influence, HEI leadership, social determinism and voice) can be seen through a Habermasian conceptual framework for Ed Tech change. Drawing largely upon his two-volume *Theory of Communicative Action* published in 1984 and 1987, this section of the literature review builds upon part one and justifies communicative rationality as a significant conceptual framework for this research, as indicated in the thesis title itself. Habermas's ideas allow for a 'purposeful pursuit of pessimism' (Selywn 2013, 15) towards a pragmatic contribution to HEI practice, by providing a framework through which academic perceptions can be used for change (see discussion, section 5.02). This is important since no research has yet synthesised Educational Technology, leadership, perceptions, change and the HEI using the Habermasian conceptual framework described below. I would also like to counter claims that Habermas is too utopian, even 'Panglossian' (Savin-Baden 2008, 60), by developing tangible recommendations based upon his theoretical oeuvre.

Fundamentally, a Habermasian conceptual framework allows for a critical exploration of the negative perceptions of Ed Tech in the HEI (e.g. colonisation, section 2.2.3) and provides a means through which the leadership of Ed Tech in the HEI might be improved. The most important contribution is the foregrounding of communicative rationality (section 2.2.4) as an essential lens through which the research is envisaged (RQ1), conducted (RQ2) and operationalised (RQ3). Fundamentally,

communicative rationality can help to (a) enhance our understanding of recent Ed Tech change in the HEI and (b) provide a basis for exploring other ways to lead on Ed Tech implementation. Envisaging HEI leadership alongside communicative rationality is directly related to RQ1c (see Appendix A for sub-questions) and provides a conceptual basis for considering RQ3.

Whilst this section cannot offer a detailed exposition of all Habermas' theoretical oeuvre, it provides an overview of relevant ideas using largely primary and sometimes secondary sources. Habermas's ideas, now several decades old, were themselves born from dialectic exchange so it would be remiss to ignore subsequent secondary theoretical developments in the field. Murphy (2017, 14) agrees that 'too often researchers approach theories such as those developed by Habermas as if they were set in stone and therefore immune to change or even challenge'. Recent secondary literature re-appraises the ongoing currency of his work, sometimes through its application in a modern social or educational context (Conle 2010; Edwards 2017; Fleming 2010; Murphy 2017; Woelders & Abma 2017). As such, secondary literature is used to augment and refine Habermas' original concepts, where appropriate, to make them more applicable to a modern HEI Ed Tech landscape that was very different when Habermas first developed his ideas.

### 2.2.2 Systemworld and lifeworld

Since the concepts of systemworld and lifeworld are so fundamental to my appropriation of Habermas's communicative rationality, it is prudent to begin with a consideration of these terms. Habermas (1987, 152) suggested that 'we view society

as an entity that, in the course of social evolution, gets differentiated both as a system and as a lifeworld'. These labels allow us to conceptualise the impact of dual forces in operation in modern societies, as well as the HEI, and are explained below.

By systemworld, Habermas refers to systems that are broadly divided into two sub-systems (i.e. money and power). He argues that 'in modern societies, economic and bureaucratic spheres emerge in which social relations are regulated only via money and power' (Habermas 1987, 154). In other words, the instrumental rationality of efficiency and bureaucracy are prioritised in modern societies. Habermas (1987) recognises that the state and the economy have vital roles and whilst he does not advocate removal of them 'his use of the systems approach is a critical one' (Edwards (2017, 26). Within a HEI the systemworld might be exemplified in manifestations of the incumbent and oft-critiqued practices of senior management, IT services, HR, registry, finance and other central administration (Brookfield 2010; Conle 2010; Emilson 2017).

Lifeworld, originally a phenomenological concept from Husserl, is considered more cognitively by Habermas as a symbolic space of shared communicative norms. According to Habermas (1987, 137) the 'symbolic structures of the lifeworld are reproduced by way of the continuation of valid knowledge, stabilization of group solidarity, and socialization of responsible actors' through communication. This implies that the reinforcement of knowledge and socialisation of groups is achieved through communication. Such communicative solidarity perpetuates in the domains of family life, cultural activity and other informal spaces through various acts of communication. Modern interpretations succinctly describe lifeworld as the

‘background consensus of our everyday lives’ (Murphy 2010, 82), as well as the ‘shared horizon of understanding and possible interactions’ (Cherem 2016, 15). In a research chapter exploring ways in which Habermas could be applied to social research, Kennedy (2017, 64) suggests that ‘The lifeworld is woven from intersubjective understanding and communication between people, who treat each other as ends in themselves rather than as a means to another’s end’. As such, the communicative rationality associated with the lifeworld (see 2.2.4) is distinct from the instrumental rationality associated with the systemworld (see 2.1.4).

As previously implied, systemworld and lifeworld allow us to conceptualise society in two broad ways. The knowledge creation and delivery of formal education is ‘both part of the apparatus of the state [systemworld] (by engaging in policy-making, delivering programs and services) and highly critical of it [lifeworld]’ (Fleming 2010, 121). Crucially, Habermas (1987) states that an equilibrium between systemworld and lifeworld is important because the systemworld is wholly reliant upon the lifeworld to exist and neither should dominate the other. In industrial societies, for example, the systemworld of the economy cannot exist without the lifeworld of workers generating wealth through their provision of labour. Yet if the economy operates hegemonically, this can detrimentally affect the capacity of the workers to contribute to the parasitic economy. In a volume attempting to interpret and simplify his ideas, Pusey (1987, 107) argued that ‘Habermas invites us to look at our own modern condition as a kind of tug-of-war between the lifeworld and the system’ and this is explored pragmatically in the discussion chapter in relation to values and leadership in the HEI.

### 2.2.3 Colonisation of the lifeworld

The colonisation of the lifeworld is one way to envisage how Educational Technology has developed in the post-1992 HEI. Habermas (1987) argued that the systemworld originates in the communicative practice of the lifeworld, it has grown to become a hegemonic force that has become destructively parasitic upon the very lifeworld it depends upon. The 'rationalization of the lifeworld makes possible the emergence and growth of subsystems whose independent imperatives turn back destructively upon the lifeworld itself' (Habermas 1987, 186). Habermas called this the colonisation of the lifeworld by the systemworld, whereby the instrumental reason of the systemworld begins to supplant the communicative reason of the lifeworld. Such colonisation can lead to what Habermas (1987, 327) described as 'cultural impoverishment' where the legitimacy of the lifeworld is devalued by the instrumental power of the systemworld 'destroying its communicative fabric' (Edwards, 2017, 23). In short, the systemworld tends to dominate the lifeworld and stifles its communicative 'oxygen' in the process – an idea that is fundamental to my research.

One problem appears to be that when instrumental reason prevails, the ability of the lifeworld to be communicative effectively is distorted: 'As our communicative practices become colonized, we lose the ability to form our opinions and beliefs through discussion' (Blaug 1995, 429). In other words, the lifeworld is no longer able to be communicatively rational (see section 2.2.4) towards mutual agreement and consensus, which Habermas believes is fundamentally discursive in origin. Habermas (1987, 173) states that 'the more complex social systems become, the more provincial lifeworlds become. In a differentiated social system the lifeworld

seems to shrink as a subsystem'. According to McLean (2006, 76) this is evident in the pedagogic practice of the modern HEI:

As a communicatively structured area of the lifeworld, the education of university students is being colonized inappropriately by technical-rational considerations. But the very nature of pedagogic work militates against a smooth completion of a project to instrumentalize completely university pedagogy.

This might be seen when Ed Tech is implemented unilaterally as a 'one size fits all' pedagogic approach to learning and teaching that stifles bespoke approaches to practice. Another example of colonisation in the HEI is where academic research might be valued for the income it generates rather than the contribution it makes to knowledge and student learning. In an article discussing the pressure on academics to generate income, Andalo (2011, 2) argues that research councils 'are now more likely to back proposals for research which has the potential to make an economic impact and the possibility of commercial success'. In this colonised environment 'individuals become invisible' (Fleming 2008, 7) and 'the lifeworld itself, becomes no more than an environment for the system' (Outhwaite 1994, 96) which can certainly be seen in sections 4.1.2, 4.1.3 and 4.2.3 of the findings chapter. This study is rooted in ensuring that academics can be more 'visible' by applying their perceptions via a Habermasian inspired approach to change, which is of relevance to RQ3.

#### **2.2.4 Communicative rationality**

As already covered in the introduction, communicative rationality is an important lens through which the research is envisaged, conducted and operationalised. This is because it provides a powerful conceptual framework to help understand the



historical development of Ed Tech in the HEI (RQ1), offers a paradigmatic basis for gathering academic perceptions (RQ2), and provides a theoretical basis for *operationalising* these perceptions to improve practice (RQ3).

Communicative rationality for Habermas (1987, 145) referred to 'consensus formation that rests in the end on the authority of the better argument' which is achieved through 'co-operative competition for the better argument' (Habermas 1998, 290). This is done in a space of shared norms where 'everyone is allowed to introduce any assertion into the discourse and no speaker may be prevented from exercising his right to take part in a discourse and express his attitudes' (Habermas 1987, 88-89). Such a driver for consensus based on academic input is a key concern of RQ3.

Habermas wanted communicative rationality to be practiced and facilitated to help improve the disequilibrium between systemworld and lifeworld. Habermas (1996, 304) believed that 'The essential need [...] is the improvement of the methods and conditions of debate, discussion and persuasion' because 'disturbances in the material reproduction of the lifeworld take the form of stubborn systemic disequilibria' (Habermas 1987, 385). Habermas refers to such an ideal discursive state as 'undistorted communication' or 'unconstrained consensus' that is vital to the legitimacy of the lifeworld and can encourage the suspension or reversal of colonisation. Habermas (1994, 210) believed communicative rationality 'provides a standard for evaluating systematically distorted forms of communication and of life' that occur when the systemworld colonises the lifeworld. In other words, facilitating

communicative rationality might also allow agents of the lifeworld (e.g. academics) to become more acutely aware of distorted communication in the HEI.

Selected secondary literature around communicative rationality reinforces and simplifies some of the more complex Habermasian ideas and this can help to consider his ideas within an Ed Tech HEI context. Pusey (1987, 73) reiterated that communicatively rational discussion 'is completely free of compulsion' and that 'only the force of the better argument may prevail' (1987, 73). In a volume exploring how communicative rationality might facilitate deliberative democracy, Chambers (1996, 219) argues that speakers must 'approach the debate from the point of view of possible agreement'. Also, within a chapter dedicated to the implications of deliberative democracy on education, Englund (2010, 24) corroborates that Habermasian communicatively rational discussion is 'guided by an effort to reach consensus'. Arguing for the critical role of the HEI in a democratic society, it is perhaps no wonder that Fleming (2010, 118) believes 'The conviction that free, open, public discussion has a transformative function is central to Habermas' thinking' and that he is seen as the 'philosopher of democracy' (Bernstein 1991, 207). A key outcome for this research is to investigate how facilitation of communicative rationality in the HEI might empower the academic voice for inclusive Ed Tech change, supporting the idea of the HEI as democratic space.

### **2.2.5 Managerial systemworld**

The suggestion being made in this section is that there could be a connection between the growth of managerialism in the HEI and increasing encroachment of the

systemworld into the lifeworld, which is taken further the following section (2.2.6). A body of literature supports the idea that the 'new educational bureaucracies' (Walsh 2006, 114) of the systemworld tend to dominate the leadership and management of the contemporary HEI. In an article critiquing the increasing ideological distance between academics and university management, Shepherd (2017, 1) argues that 'career track managers were only seen in post-1992 universities' yet over time 'higher education has grown in size and complexity so institutions have felt the need to strengthen their management arrangements' (ibid). Citing Pollitt's (1995, 134) term 'new public management (NPM)' in their exploration of academics turned managers, Preston & Price (2012, 410) argue that 'NPM focuses upon cost cutting, transparency in resource allocation and increased performance management of both staff and resources', which are predominantly systemworld based efficiency concerns. The implication is that the steering potential of money and power can 'exert generalized strategic influence on the decisions of other participants' (Habermas 1987, 281) which is perhaps seen in the rise of managerialism in the modern HEI context.

A research interviewee in Bolden *et al.* (2016, 44) states that 'I think the tendency all over the country is to get more and more managerialist... I think, especially at universities, managers have to hold their nerve and trust their staff'. Robins & Webster (2002, 8) believe that 'managerialism has been allowed into the university system' and imply that this is an undesirable and potentially reversible development. My research is an attempt to entrust academics as partners to provide an alternative voice (RQ2) to counter the dominance of managerialism in the HEI (RQ3), especially

in relation to the prevailing technological rationality of Ed Tech implementation in the HEI (RQ1).

To summarise, unhindered systemworld manifestations operate in a similar way to the approach of managerialism, which is considered 'leadership and management to excess.... [which] in its extreme manifestation, becomes an end in itself' (Hoyle & Wallace 2005, 68). Bush (2011, 62) believes that managerialism in education prioritises: private sector and market values, measurable outcomes, individual accountability, rigid planning, target setting and the power of managers over the authority and autonomy of professionals. Effectively, this implies an imbalance in the ideal equilibrium between the HEI systemworld and lifeworld – which is probably why managerial leadership is treated with suspicion by academics whom might deem it to be incompatible with their view of the HEI (see findings 4.2.2).

## **2.2.6 Techgerialism and pathologies**

This section will consider the relationship between Ed Tech, external influence, leadership and change in the HEI. I introduce the term techgerialism to encapsulate the systemworld-based mutually reinforcing relationship between managerialism and technological rationality, covered largely in part one of this literature review. Offering a critical perspective on computers in university learning and teaching, Selwyn (2007, 90) believes that 'Higher education institutions are primarily appropriating ICTs as technologies of discipline and rationalization in the face of mounting new managerial pressures'. The problem might be that such rationalisation is 'more likely to pursue sustaining [innovation] or efficiency [innovation] than disruptive innovation'

(Flavin & Quintero 2018, 9). Exploring stratagem for technology enhanced learning, Hall (2011, 234) believes that 'institutionalised approaches reclaim and neutralise innovation within traditional, safe paradigms'. So, these ideas could represent examples of the lifeworld being potentially curtailed by the instrumental demands of the systemworld in the HEI. In other words, techgerialism might be seen as a hegemonic catalyst for lifeworld colonisation in the HEI. In a critical examination of universities, Hussey and Smith (2010, 20) suggest such hegemonic managerial operations are deleterious and I would argue that this is exemplified in the colonisation of the lifeworld by the systemworld in relation to HEI managerialism:

Managerial systems are brought into being to serve - to facilitate and assist - the academic staff. However, once these managerial bureaucracies are brought into being their first tendency is to proliferate; their second tendency is to become focused upon their own concerns rather than the concerns of those they were created to serve and their third tendency is to change what they manage for their own purposes and to the detriment of the original function.

Such domination by the systemworld can have implications for the implementation and use of Ed Tech in the HEI. Habermas (1987, 385) argued that 'when steering crises – that is, perceived disturbances of material reproduction – are successfully intercepted by having recourse to lifeworld resources, pathologies arise in the lifeworld'. Pathologies emerge because of conflict at 'the seam between the system and the lifeworld' (Habermas 1981, 113) when the systemworld encroaches too far into the operations of the lifeworld. The pathological consequences finally occur when the 'technical [*sic*] rationality of the system displaces the communicative rationality of the lifeworld' (Edwards 2017, 33). There are comparable consequences when systemworld rationale influences the implementation and use of Ed Tech in the HEI (see findings chapter).

Habermas (1987, 143) identified nine pathologies in culture, society and individual when there are systemworld-led disturbances to cultural reproduction, social integration and socialisation. These specific pathologies are listed as: loss of meaning; withdrawal of legitimation; crisis in orientation and education; unsettling of collective identity; anomie; alienation; rupture of tradition; withdrawal of motivation; psychopathologies. Habermas provides a complicated and comprehensive explanation of his original pathologies that cannot be adequately addressed here. On that basis, the synthesis and simplification of Habermasian pathologies by Finlayson (2005, 57) will be used for this research, which are detailed as:

1. Decrease in shared meanings and mutual understanding (anomie)
2. Erosion of social bonds (disintegration)
3. Increase in people's feelings of helplessness and lack of belonging (alienation)
4. Consequent unwillingness to take responsibility for their actions and for social phenomena (demoralisation)
5. Destabilisation and breakdown in social order (social instability)

Crucially, Habermas (1987, 144) also lists nine corresponding, arguably under-developed, corollary communication-based actions that assist cultural reproduction in the regenerative lifeworld. These values might be 'antonymic' to his original pathologies and could help to decolonise the lifeworld. The concept of values is explored further in the following section and furthermore within the discussion chapter, which will consider a simpler concept of values as counter-point to the five pathologies summarised by Finlayson (2005). Such values are deemed important to ensure the communicative practice of the lifeworld is maintained and their precise role is developed in more detail within the discussion chapter.

Overall, whilst there may nothing intrinsically inappropriate about pursuing efficiency through techgerial implementation of Ed Tech, both technological rationality and managerialism can too often become the primary steering mechanisms for Ed Tech change in the HEI. However, such unbridled systemworld dominance has implications for the delicate equilibrium that is required between systemworld and lifeworld, according to Habermas. Somewhat sardonically, Hussey & Smith (2010, 19) suggest that certain forms of management were introduced for well-intentioned reasons 'but, like the grey squirrel, they have unforeseen and damaging consequences'. The findings chapter considers more directly how techgerialism might influence Educational Technology implementation and use in the HEI.

#### 2.2.7 Voice and the public sphere

This section justifies gathering academic perceptions as the voice of the academics that later influences my research design. In a volume exploring the relationship between education, technology and future change, Facer (2011, 6) argues that 'the future is not something that is done to us, but an ongoing process in which we can intervene'. My research suggests that such intervention might be possible by facilitating the primacy of the lifeworld in some way. In relation to political discourse at university, Habermas (1970, 10) declared the importance of 'rationalizing decisions in such a way that they can be made dependent on a consensus arrived at through discussions free from domination'. This is a useful approach for gathering perceptions (RQ2) and using them to improve practice (RQ3).

Exploring lecturers' perspectives on Ed Tech in the HEI, Bond & Goodchild (2013) refer to a 'third space' for the collaboration and engagement between stakeholders in a more democratic community environment. Such a theory allows for a synthesis of diametrically opposed cultural positions (Bhabha 2004; Idrus 2015; Pahl and Rowsell 2005). This third space is not dissimilar to the Habermasian 'public sphere as the interface between system and lifeworld imperatives' (Kennedy 2017, 67). Habermas (1987, 319) conceived the public sphere as an imaginary space that 'comprises communicative networks amplified by a cultural complex, a press and, later, mass media'. Fleming (2010, 113/4) succinctly details some of the important characteristics of the idealised public sphere, originally envisaged by Habermas:

The public sphere is a community of discourse in which rational discussions on matters of public concern take place. It refers to those informal conversations that people have, where they can discuss matters of mutual concern as peers, and learn about facts, events, opinions, interests and perspectives of others in an atmosphere free of coercion and inequalities that would incline individuals to acquiesce or be silent.

Within the HEI, a public sphere might be where the lifeworld of the academic community is able to be genuinely communicatively rational. Regarding the negative impact of colonisation, 'the solution, according to Habermas, is to revitalize autonomous, self-organized public spheres that are capable of asserting themselves against the media of money and power' (Fleming 2010, 119). As such, a communicatively rational public sphere might be one way to assist the delicate equilibrium between systemworld and lifeworld – facilitated by hybrid leadership (see 2.1.8) that *might* be more amenable to communicatively rationale change (see section 5.08). Savin-Baden (2008, 65) believes such opportunities for dialogue are important to nurture the academic voice:



Dialogic spaces need to be framed, delved into, argued for and prized. To speak, to be entitled to speak and to share our perspectives is a vital space in academic life, and must be reclaimed so we are neither rendered, nor render ourselves, voiceless.

Much literature supports the idea that rational communication and interaction are an important element of organisational change. For example, in their exploration of technology as a product and a systemic process, Amiel and Reeves (2008, 31) argue that engaging with technology involves 'complex interactions of human, social, and cultural factors [as well as] new directions in research goals, moving away from traditional predictive methods to long-term collaborations based on development goals'. Interpreting Habermas, Cherem (2016, 19) builds upon the intervention potential of communicative rationality by suggesting 'if we come to reject inherited mutual understandings embedded in our normative practices, we can use communicative action to revise those norms or make new ones'. The implication here is that a public sphere might even help to develop *new* norms and understandings within the HEI that have resonance beyond the domain of improving Ed Tech implementation.

Some literature implies that there is not enough practitioner-led research in Ed Tech, and this might represent a gap for this research. Kinshuk *et al.* (2013) look at trends in Ed Tech research by looking at several highly-cited articles in the *Journal of Educational Technology and Society* – a journal that claims to be the 'mouthpiece' of educational practitioners and researchers. When the authors look further afield than their original journal, they declare 'there has been very little input from actual practitioners in the research process. Most research in educational technology area

[sic] has been undertaken by computer scientists and alike' (Kinshuk 2013, 4) whom might adopt different paradigms and epistemological foundations to this study.

This dearth of practitioner input is probably why Amiel & Reeves (2008, 32) argue that researchers should be 'engaging with practitioners in constructing what constitutes valuable research in order to help direct technological development rather than react to it'. Such bottom-up input may be what prevents change consensus being 'a negotiated settlement between elites' (Chambers 1996, 198) that would resemble Habermas' original bourgeois (rather than public) sphere. Examining educational ambitions via technology, Laurillard (2008, xvi) supports the idea of a combined top-down, bottom-up approach to technological change, with the latter prioritised for matters of learning and teaching in the HEI:

The problem is that transformation is more about the human and organizational aspects of teaching than it is about the use of technology [...] Better to have both [top-down and bottom-up change], but too many educational institutions still lack serious leadership engagement with the innovative application of digital technologies. In any case, innovation in the pedagogical aspects of teaching and learning should be coming from the academic community.

In summary, no research has yet tried to combine a longitudinal study of lifeworlds in the HEI alongside Habermasian communicative rationality to investigate the best way to lead on organisational inclusive Ed Tech change. The next step is to establish the precise methodological approach to attempt to address the research gap identified by this literature review. Fundamentally, 'The dialogue and discussion between stakeholders, a cornerstone of democratic practice, is too often missing from the agenda in educational technology research' (Amiel & Reeves 2008, 37). I would like to ensure that dialogue is very much the impetus as well as the outcome

of this inquiry. This is important because there have not been enough attempts to apply Habermas to education (Murphy & Fleming 2010) and to social research in general (Murphy 2017).

### 2.2.8 Beyond Habermas

There are a variety of alternatives for how the thesis' conceptual framework could have been envisaged, some of which can inform the 'research batons' for future investigation (see thesis conclusion 6.3). The critical focus of Marxism offers a useful way to consider the relationship between those in positions of formal power in the HEI and those who are not. However, whilst Marxism would call for the destruction of systemworld manifestations by empowering the lifeworld, Habermas saw capitalism as an 'unfinished project' that requires more lifeworld communicative input into the operations of the dominant elite. As such, I retain the critical outlook towards HEI systemworld manifestations, but Habermas offers a realistic framework for reconciling the lifeworld *with* the systemworld rather than against it.

Giddens (1984) idea of structuration suggested there should be equal status between structure (i.e. wider societal patterns and relationships that can limit choice) and agency (i.e. individual free will to make free choice), without necessarily attributing primacy to either concept. In this sense, structure has affinity with the concept of systemworld and agency with lifeworld. 'What emerges is a tussle between structure and agency' (Preston & Price 2012, 414) or an issue akin to the concept of socialisation vs autonomy. Appeals to the importance of structure would certainly explain the pan-HEI procurement of Ed-Tech solutions. Also, academic

resistance might be explained by the pedagogic constraints that overly monolithic Ed Tech software might impose upon teacher agency. Whilst structuration seeks equal status between structure and agency through emancipatory knowledge, Habermas offers a means to achieve a similar balance through ongoing discursive communicative practice.

Another possible way to conceptualise my research might have been through Bourdieu's (1992) ideas around habitus (like lifeworld, articulated via perceptions) within HEI fields (i.e. Ed Tech) where there is inevitable conflict. Perhaps the encroaching of incongruent neoliberalism into the shared academic rules (*doxa*) of Ed Tech engagement could be a reason for such conflict. Summarising Bourdieu as part of their volume on social research, Inglis & Thorpe (2012, 214) argue that 'habitus disguises itself by making people see the world in common-sense ways, and these ways generally do not allow actors to turn their critical reflection upon the habitus'. Such critical reflection allows people to 'become conscious of the fact that they have – indeed they are – a habitus' (Inglis & Thorpe 2012, 215). This offers a conceptual framework that could raise awareness of stealth subjugation, but Bourdieu remains pessimistic about emancipation due to the pervasiveness of hegemonic power in society.

In this regard, Foucault's notion of normalising power would be another way to think about the dominant institutions of our times, especially in relation to Althusser's ideological state apparatus (covered in 2.1.4). Foucault (1975) argues that power is ubiquitous and can be found in unexpected domains, such as in seemingly innocuous yet fundamentally techgerial HEI Ed Tech. However, whilst Foucault

certainly embraces pessimism, his endgame is rather anarchic (e.g. requiring the wholesale abatement of well-established HEI apparatus) and perhaps too quixotic to be of pragmatic use to a realistic contribution to practice.

## 2.3 Conclusion and research questions

To conclude, it would be useful to signpost the ways in which this literature review covers the three main research questions, outlined here:

RQ1: How has the role of Educational Technology developed in the post-1992 HEI?  
RQ2: How do academics articulate their perceptions of Educational Technology implementation in the post-1992 HEI?  
RQ3: How might academic perceptions be used to influence implementation of HEI Educational Technology?

The literature review has addressed large sections of RQ1, very little of RQ2 and provided the theoretical basis for addressing RQ3. For RQ1, the role of Ed Tech seems to have evolved into serving interests beyond learning and teaching. Some of the main drivers are systemworld managerialism and technological rationality within an increasingly corporate HEI that must deal with larger student populations and remain efficient. In short, the prevailing winds of Ed Tech use in the HEI have become increasingly techgerial over time. The Habermasian conceptual framework of communicative action provides a lens through which academic perceptions might eventually be operationalised for change but it would be premature to attempt this here (RQ3). What is currently missing is the communicatively rational voice of the academics involved in Ed Tech implementation and use (RQ2) to gain a more

complete understanding of the case study of a decade of Ed Tech change – which is what the following research design intends to address.

## Chapter Three: Research Design

### 3.01 Introduction

With the literature review addressing some of RQ1, the focus of this chapter is to consider the most methodologically appropriate research design for capturing the perceptions required for RQ2. As suggested in section 2.3 of the literature review, the focus of this chapter is to explore how I sought to gather the voice of the academics involved in HEI Ed Tech. My intentions herein are to ensure that the research gap (section 2.2.7) is addressed: that dialogue between HEI stakeholders is an impetus as well as an outcome of this research. This chapter is structured as a reflexive account of my methodological, professional and ethical changes over a specific period that informs an emergent and provisional research design. By taking a storied approach to presenting this chapter (rooted in narrative research, see below) there is some repetition of material that is retained to help make contextual sense of my research dilemmas and challenges.

### 3.02 My research motivation

Congruent with my methodological paradigm (see 3.03) I offer this section to declare openly how my personal predilections may have influenced this research. My research motivation developed over several years as a former 'tech-evangelist' practitioner within my own HEI. I was convinced of the benefits in using Ed Tech and wanted to enlighten my teaching colleagues accordingly. My professional role

evolved from being an informal and distributed Ed Tech leader towards being a more formal advocate, trainer, supporter and mentor to encourage colleagues to engage with a wide range of Ed Tech possibilities.

Shortly after I began offering semi-formal Ed Tech support and internal group training sessions in the workplace, I experienced academic resistance aimed at my 'evangelical' approach to Ed Tech. After conducting small scale research and scholarship in the area I came to realise that there was more complexity to this resistance than I originally expected. I wanted to ensure that my doctoral research would capture and explore this complexity thoroughly and robustly. A significant critical incident for my research motivation was the anonymous written feedback that I received from an academic colleague after a group training session, which enigmatically implored: "Don't join the dark side!". I became increasingly fascinated by this comment and was very keen to find out (a) what it meant and (b) if it was shared by others.

I could not identify the colleague who gave this feedback due to the anonymity afforded to the source, so clarifying its meaning was challenging. Eventually, I decided to seek out the possibility of similar views from other colleagues.

Concurrently, I became aware anecdotally that resistant academic staff were being labelled as 'technophobic' by Ed Tech leaders in the HEI and I felt this was rather unjustified. In short, I wanted to engage critically and dialogically with my colleagues to explore this 'dark side' feedback more thoroughly. I felt that much could be learned from exploring the overlooked voice of the teaching practitioner in the HEI



and this might eventually help to decolonise the lifeworld and improve practice (see 2.2.6).

My historical academic practice as a student of and then lecturer in media studies featured sustained social critique, perhaps encouraging a dystopian lens for my doctoral research. Media as an interdisciplinary subject is characterised by, for example, in-depth critical analysis of texts, investigation of societal power imbalances, and critical examination of hegemonic grand narratives that pervade social reality – this is normally seen through the textual practice of certain ideological state apparatus (e.g. powerful media institutions). This is also where I first encountered Habermas's notions of public sphere and communicative rationality, the potential of which later appealed to me as a way to gather more egalitarian and robust data in my doctoral research.

### **3.03 Methodology and paradigm**

This section outlines the personal epistemology and positioning that informs my methodology. I declare herein the axiomatic beliefs and guiding principles that remained relatively consistent throughout my doctoral research. Wellington (2000, 16) states that 'The interpretive researcher... accepts that the observer makes a difference to the observed and that reality is a human construct.' I therefore acknowledge my impact as a research tool that is inextricably linked to the research in a positive way, as originally suggested in the thesis introduction.

The ontological idea of 'objective, value-free, generalizable and replicable' knowledge (Wellington 2000, 15) within an external and verifiable reality was never my personal epistemology. Instead, I believed in a largely subjective and unpredictable social reality, but I felt that knowledge specific to certain locales can have a consistency in a community of practice (Wenger 2000) and may be evident beyond (section 6.3) after further research. My epistemology was predominantly rooted in social constructionism, where meaning is socially constructed through interaction and not simply 'out there' waiting to be discovered. I agreed with Usher (1996, 21) that 'Understanding an object is always "prejudiced" in the sense that it can only be approached through an initial projection of meaning' so I declare my own prejudice immediately. In addition, Cousin (2009, 11) states 'social constructionists argue that research methods construct social realities as much as they might describe or "discover" them', implying that my influence upon my own research is inevitable.

One way that a social constructionist might gather robust knowledge is through the consensus formation associated with intersubjectivity: 'whereby there is mutual agreement, generally among a small group of people, about what is real' (Savin-Baden & Major 2013, 59). This is compatible with the conceptual framework of communicative rationality as 'a consensus that rests on the intersubjective recognition of criticisable validity claims' (Habermas 1984, 17). Exploring *how* this intersubjective knowledge might be facilitated and *what* the ensuing knowledge might mean is a key concern of the whole thesis, but this is especially important to the robustness of this research design and the later discussion chapter. Usher (1996) advocates a 'fusion of horizons' as a hermeneutic and dialogical alternative to

empiricism that is 'the outcome of intersubjective agreement where different and conflicting interpretations are harmonised. By comparing and contrasting various interpretations, a consensus can be achieved despite differences – indeed because of differences' (1996, 22). This suggests that intersubjective consensus concerning even disparate views may be possible.

If communicative rationality can be seen as a conceptual framework through which intersubjective consensus might resolve validity claims, and my epistemology was social constructionist, then it made sense for the research design to ensure that 'people can engage in reasoned ways with each other, reaching national consensus on issues... a condition where communicative rationality is completely free to work as it should' (Inglis & Thorpe 2012, 77). My view was that an emergent research design might avoid the constraints of rigid paradigmatic orthodoxy into the research process, to help conduct genuine inquiry.

For all the reasons covered above, I sought a flexible approach and emergent research design that could accommodate an open, iterative and responsive approach to data collection and analysis. I did not wish to be prematurely hamstrung by the constraints of any paradigmatic orthodoxy yet, paradoxically, I also craved the rigour that a recognised research methodology might provide. I was drawn to the idea that 'Methods will be selected in the context of practice as the situation unfolds' (Elliot 2006, 178) and that 'My account of educational research' is an account of inquiry without a methodology, but this does not imply that it does not make use of data gathering techniques' (Elliot 2006, 179). In support of an open approach, Lincoln & Guba (1985, 41) suggest that certain researchers 'allow the research

design to emerge (flow, cascade, unfold) rather than to construct it preordinately (*a priori*) because it is inconceivable that enough could be known ahead of time about the many multiple realities to devise the design adequately'. This suggestion was the single most important guiding principle for my original research approach.

Rooted in my social constructionism, I believed that one of the ways in which social reality is constructed is through the sharing, co-negotiating and refinement of stories that impose order on an otherwise disparate range of human thoughts and experiences. According to Clark (2008) the mind processes narrative and memory in the same way suggesting there may be a cognitive link between the two. In addition, Savin-Baden & Major (2013, 241) believe that 'People tend not to hide truths when telling their stories' and this represented a very appealing possibility of authenticity in narrative for me. However, Didion (1961), cited in Kramp (2004, 107), believes that 'narrative fills the space between "what happened" and "what it means"' which could be seen as introspective and cognitive 'expressions of individuals' internal states' (Esin *et al.* 2013, 207). However, I was more interested in 'the states produced socially by the narratives; [because] the narratives are, in such accounts, social phenomena' (ibid). Fundamentally, both introspective and socially focused narrative research is possible within certain narrative approaches, explained next.

In addition to this, Spector-Mersel (2010, 205) argues that 'every individual, family, organization and group "has their narrative"' but, according to Foucault (1975), there might be a hierarchy of discursive power imbued within these narratives. If, as Eisner (1991, 191) suggested, 'all stories, including those in the natural sciences, are fabrications – things made' then it is in the nature and purpose of that fabrication that

my research interests lie. For example, the dominant hegemonic stories of normalising power associated with the systemworld in the HEI can be challenged by the micro stories of academics because of the possibility that 'stories can have effects beyond their meanings for individual storytellers, creating possibilities for social identities, group belonging, and collective action' (Riessman 2008, 54). As such, by focusing on the counter-narratives of the lifeworld, my emergent methodology was rooted in emancipatory intentions to empower the voices of those that feel excluded within a safe space of disclosure (Creswell 1998; Harding 1988).

Overall, I became increasingly drawn to the opportunities around narrative research because, as a social constructionist, I felt that engagement with stories is how we make sense of the world and because of the idea that 'human beings and stories are intertwined' (Varaki 2007, 1). I was drawn to the flexibility of narrative research approaches alluded to by several authors: Clandinin and Connelly (2000), for example, believe that even the research questions and purposes of research may change as narrative research is conducted. Savin-Baden & Major (2013, 231) argue that 'Narrative approaches are theory, process, data and product combined to form a unique form of inquiry' so that the process of telling the story as well as the story itself becomes important in the research. These possibilities intrigued me, and I sought to explore them.

### **3.04 My role as insider researcher**

To summarise, I entered my doctoral research broadly as an insider social constructionist with a critical secondary lens. I declare this immediately since I

believe that 'Metaphysical beliefs must be accepted at face value – representing the benchmark against which everything else is tested' (Lincoln & Guba 1985, 14). This insider perspective might be alien, perhaps even inaccessible, to outsiders collecting data on my behalf. I believed that my affinity with participants and the organisation would provide 'a better initial understanding of the social setting' (Mercer 2007, 11). My hope was that such a rapport would encourage rich and candid disclosure to 'enhance understanding of the phenomenon under study' (Wells 2011, 219) towards 'new and interesting possibility' (Alvesson and Skoldberg 2009, 312). Usher (1996, 15) argued that 'the "individual" of positivist/empiricist research is unlike anyone recognisable in the real world. These are abstracted individuals with no history and unaffected by cultures, values, discourses and social structures'. By contrast, as a social constructionist, I *sought* the social dimension of participant interaction with me. I believed a safe space of mutual insider trust would facilitate 'thick descriptions' (Geertz 1973). As Trowler (1998, 148) suggested:

An insider account based on multiple methods of data collection also has the potential of allowing us to move beyond the meanings, understandings and intentions of actors, giving insights into the structural contexts in which they operate and the unintended consequences of their actions.

I was aware that a drawback of being an insider is that I might too readily shape, and allow myself to be shaped by, the voice of my participants and this was initially a troubling concept for me. According to Mercer (2007, 11) the insider researcher is 'more likely to take things for granted [and] develop myopia' compared to an outsider who is probably able to be more detached in their approach. In addition to this I was concerned that interviews could become a space for reinforcing existing mutual critical beliefs about the host HEI – especially given my secondary critical lens

already declared. I concluded that no matter what approach is taken 'there is no telling it like it is, for in the telling there is making' (Eisner 1991, 191) and I was not 'some kind of virus tool which contaminates the research' (Cousin 2009, 10). In other words, my role as participant influencer was to be explored as data rather than seen as a barrier to data. The ethical challenges and difficulties of my insider approach are explored throughout this chapter, but more overtly in section 3.12.

### 3.05 Exploring case study

As a design principle, I saw the case study as a way of delineating the boundaries of the emergent study (i.e. academic perceptions of a decade of Ed Tech change in a single HEI) and for organising the data within it. I also felt that 'the case study design allows for an intensive examination of a phenomenon in context' (Wells 2011, 16). However, with reference to the imprecision of case study, Savin-Baden & Major (2013, 161) offer a typology that understands case study through either (1) the purpose of the case study, (2) the discipline within which it belongs or (3) the research approach it adopts. Within this typology, I would say that my case study began as exploratory in purpose, sociological in discipline and narrative in approach during round one interviews. However, as will be detailed later, by round three interviews this became more evaluative in purpose, remaining sociological in discipline but become increasingly pragmatic in approach.

I saw case studies as having the potential to accommodate 'a wide range of different methodologies' (Wellington 2000, 100) to explore multiple sources of evidence as the research unfolded. In that sense, I saw it more as a 'procedure for inquiry'

(Creswell 2015, 476) that can be used to make sense of the participant voice in this way because 'interrogating atypical, extreme, or paradigmatic cases is often necessary to extend theory about a general problem' (Riessman 2008, 194). I sought to assemble a rich case study of academic perceptions undergoing Ed Tech change within the HEI, which I anticipated might be readily storied by participants. I wished to provide a 'unique portrayal of real people in a real social situation by means of vivid accounts of events, feelings and perceptions' (Basit 2010, 19) within a 'spatially delimited phenomenon (a unit) observed at a single point in time or over some period of time' (Gerring 2007, 19). It felt as though a case study approach would help me achieve all these objectives.

I wanted my research to impact positively upon HEI change and I believed a case study might assist with the contribution to practice required by my thesis. Basit (2010, 21) believes that 'Insights from case studies may be directly interpreted and put into action for improvement of policy and practice'. Case studies are seen to 'provide a natural basis for generalization' (Adelman *et al.*, 1980, 51) but such generalisation is different to positivistic ideals. For example, Robson (2002) espouses analytical generalisation wherein developing theories from one case can help researchers to understand similar cases, phenomena and situations. I appreciated that 'generalisation' from my case study would probably be contingent and localised, perhaps only tentatively applicable outside the host institution without wider research. However, Wellington (2000, 99) believes that 'even if case study research cannot produce or create generalizations, it can be used to explore them', perhaps by challenging prevailing wisdom, for example.



Fundamentally, my hope was that I would construct some original and interesting participant stories of Ed Tech change that might question the hegemony of technological rationality (see 2.1.4) in some way. My hope was that other researchers might later look for similar stories in their own HEIs or develop my research contribution in some other way. Lincoln & Guba (1985, 37) concluded that 'prediction and control are unlikely outcomes although some level of understanding (*verstehen*) can be achieved', which is important to RQ2.

### 3.06 Reflecting on the pilot

Before embarking on my doctoral research, I undertook a pilot study to investigate opinions of Ed Tech for which I deliberately adopted a personally incongruent methodology: a multiple-choice questionnaire survey within a largely positivist paradigm, but with space for optional written comments. The purpose was to obtain an overview of academic perceptions that could be explored in more depth later within my doctoral research. The questionnaire was printed and handed in person to 58 colleagues within the host HEI since I believed that an in-person request might elicit more responses. However, I maintained that the positivist research paradigm was ill-equipped to explore perceptions adequately since 'mathematical formulas can never uncover the richness and complexity of our experiences' (Varaki 2007, 3). I anticipated academic perceptions would be quite complex given my existing shared insider history with the participants and wider research.

The pilot questionnaire had an unexpectedly high response rate of 69% (40 of 58 returned) and significantly more qualitative written comments than I had anticipated

(included for reference in Appendix B). This is significant because written comments were entirely optional and some of the comprehensive and controversial views expressed reinforced my own critical secondary lens. This reminded me of, but also challenged, Selwyn's (2011, 179) belief that 'Education and technology is simply not a topic that many people talk openly about, let alone get impassioned or angry about'. Some respondents invited me for further discussion and/or wished to know more about my research. Alongside my commitment to communicative rationality, this reinforced my belief that face-to-face interviews might be an ideal way to capture more nuanced perceptions. I also assumed that spoken responses were communicatively less demanding for the participant to share than written responses.

### **3.07 An emergent NI approach**

Choosing the most appropriate research method 'is one of the most important, and difficult, responsibilities of a researcher. The choice requires an act of judgement, grounded both in knowledge of methodology and the substantive area of the investigation' (Shulman 1981, 11). However, at risk of 'unnecessary confessionals and narcissism on the part of the researcher' (Luttrell 2010, 4) I adopted a deliberately emergent research design because I wanted early knowledge of the actual participant perceptions in the field of investigation. Whilst I was convinced of the merits of interviews as a method, justified above, I was yet to formulate the logistical approach to conducting them and the analytical framework for making sense of them.

I felt that I had a limited window of opportunity within which to gather exploratory data. With colleagues ready and willing to participate in my research, I was concerned that their enthusiasm might wane if I delayed interviewing them to refine my research design. As such, I made an impromptu decision to start gathering data amidst a closing window of impending academic annual leave. Some of the pilot respondents had already invited me for an informal discussion as part of their written comments on my pilot questionnaire and the interview method was epistemologically compatible with my positionality. However, I adopted a rather intuitive approach to my interview schedule and questions (detailed below) based upon personal experience, my pilot findings, my literature engagement and a broadly narrative approach to focus upon the individual.

There appeared to be virtue in remaining open in the precise deployment of methods because this might encourage a more unconstrained and responsive approach to planning, collecting and processing data. Cousin (2009, 2) argues: ‘do not let the tail wag the dog – research methods are in the service of the researcher, not vice versa. Treat rules about methods as guidelines which you can adapt, refine, expand or trim’. Elliot (2006, 178) echoes this sentiment: ‘Whatever helps practitioners to develop a reasoned capacity for action in the service of their educational values will do.’ Both these ideas became a guiding principle for my initial research ethos and provided a level of flexibility that appealed.

I justified my flexible approach with the belief that ‘entering the research with an “ism” risks taking an answer rather than a question into the enquiry’ (Cousin 2009, 14). Overall, I was drawn to the idea that ‘what emerges as a function of the

interaction between inquirer and phenomenon is largely unpredictable in advance' (Lincoln & Guba 1985, 41). Habermas himself argued that 'within a process of reaching mutual understanding, actual or potentials, it is impossible to decide *a priori* who is to learn from whom' (Habermas 1990, 26). So, I wanted to wait until some of my participant interaction had taken place to improve my original understanding of academic perceptions around Ed Tech. Sheila Trahar shares a research position that overlaps almost uncannily with my own predicament at the time:

From the very beginning of the study I wanted to provide "insightful accounts of processes which go beyond the particular story" (PRING, 1999, p. 6). It would, therefore, have been disingenuous and inconsistent with the methodological paradigms that I espoused eventually to "plan my tactics in advance" [...] Sustaining this methodological agnosticism enabled me to remain open to, and to explore, a myriad of possibilities for conducting intercultural research. Holding on to this "not knowing" was uncomfortable but maintaining the position of the agnostic enabled me to recognise eventually the suitability of Narrative Inquiry. (Trahar 2009, 2).

Whilst my emergent research design was risky, because it could be seen as lacking rigour, it felt *respectful* to approach my participants in this unorthodox way because I suspected it would allow our conversation to flow free of the constraints associated with paradigmatic orthodoxy. Therefore, the conversation could unfold according to the 'rational force of the better reasons' (Habermas 1998, 290) rather than any obligations to comply with the rules of any research framework. I embarked on a rudimentary version of Narrative Inquiry (NI) since it allowed participants to share their voice unencumbered and was flexible enough to adapt as the study progressed.

Narrative Inquiry allowed me to develop longitudinal case studies, which I saw as important to contextualising storied data over time. Narrative Inquiry (NI) offers

‘novice and seasoned researchers a great deal of freedom in the topics and interests they pursue and the methods and approaches they use’ (Chase 2011, 431), so it appeared to be an ideal emergent approach for me. Mishler (1999, xv) calls it an ‘umbrella term’ on one hand yet also amorphous in that we ‘cannot police the boundaries of narrative inquiry’ (Elliot cited in Chase 2011, 430) as there is a state of ‘near anarchy’ in the field (Mishler 1999). I embraced this ‘anarchy’ to justify my unorthodox approach, but I realised that further refinement would at some point be required, as described in 3.10 below.

### 3.08 Participant choice for interviews

For reasons already declared above, interviews were appropriated as method since RQ2 asks ‘How do academics *articulate* their perceptions of Educational Technology in the post-1992 HEI?’. I believed exploratory interviews allow researchers to capture a live exchange in which they can adjust their approach in situ to pursue lines of enquiry that are interesting, unexpected and fruitful. My approach was to encourage open-ended discourse and let the conversation flow almost anywhere in the first round, instigated with a bespoke informal question or observation for each participant to encourage the initial conversation.

Institutional ethical approval was sought and agreed (see Appendix G) because as an insider I anticipated some controversial or sensitive material from participants (see section 3.12 for full details). I also sought informed written consent from participants (see Appendix H) at the beginning of each interview and declared exactly how I planned to use, share and store their data. I informed participants of

safeguards (e.g. anonymisation, approval and revision of transcript, removal of data upon request, etc) to demonstrate my commitment to research ethics and privacy.

The interview schedules can be found in Appendix D and these were supported by visual prompts (Appendix E) to encourage and maintain conversation.

As alluded to above, I was drawn to Wellington's (2000, 72) view that my purpose is 'to give a person, or group of people, a "voice". It should provide them with a "platform" [...] In this sense an interview empowers people – the interviewer should not play the leading role'. That said, as a social constructionist, I was also drawn to the idea that the researcher 'can hardly spoil what he or she is, in effect, subjectively creating' (Holstein & Gubrium 2003, 70). In relation to RQ3, for example, I was drawn to the idea that 'some study how narratives make change happen, and some *collect and present narratives to make change happen* [my emphasis]' (Chase 2011, 427). Similarly, citing Andrews (2007, 491), Trahar (2009, 8) believes there is an important relationship between the participant, story and culture where their conversations 'reflect wider social and historical changes' and we should listen carefully to 'begin to understand the framework that lends meaning to these lives'.

My epistemological foundations as a social constructionist allowed me to explore the possibility of intersubjective agreement within the wider social reality of their environment. This socially oriented narrative approach is referred to as 'Constructionist Narrative Analysis' (Esin *et al.* 2013) and considers narratives to be largely social phenomenon as opposed to more introspective cognitive approaches to Narrative Inquiry. In my version of narrative analysis, I could consider to what extent the participants might 'act as representatives and advocates for peers'

(Thomson 2013, 83) and to what extent 'their behaviour reflects their organizational positions rather than their individual qualities and experience' (Bush 2011, 64).

Taken together, these ideas suggest that there might be wider significance to the individual stories that my research could explore.

As an insider researcher with shared historical experiences of organisational change with my participants, I decided to approach those with whom I had existing professional connection and personal rapport. In this way informal trust had already been established and I hoped this would lead to more open discussion in the spirit of communicative rationality. This seemingly limited participant sampling could be seen as a narrow field of academic participants but the literature review (section 2.2.7) found that the academic voice was under-represented, and I expected there to be enough individual difference to explore *between* participants who happened to occupy the same milieu. I was influenced by the idea that 'there are no brownie points for gathering difficult data' (Silverman 2006, 8), while appreciating that it might seem as though participants were recruited for convenience rather than rigour. More importantly I was drawn to the idea that 'good research is research conducted *with* people rather than *on* people [my emphases]' (Heron & Reason 2001, 179).

However, I did not approach participants with whom I was less professionally or personally familiar: I assumed these would be harder for me to convince to participate and I feared they might disclose less without the advantage of insider rapport.

Overall, I recruited a purposive and convenience sample (see Appendix C for participant biographies). I sought 8-12 participants so that there would be enough

data both to draw broad conclusions and to undertake in-depth analysis. I first secured an interview with a colleague who was disaffected to the point of retirement, from whom I hoped to gather candid information before his imminent departure. I then interviewed another colleague whom I knew from experience had the candour to speak openly due to his outspoken reputation. Both colleagues had different but compelling reasons for why they might openly divulge forthright opinions. Being honest and contentious, I hoped at the time that they would reinforce my own critical worldview (Henson 1992), which is a troubling ethical concern to be addressed in section 3.12 below. My approach to round one of data collection was characterised by an emancipatory intention to empower academics against what I felt was the hegemonic dominance of managerialism (see top-left of the research poster, Appendix E) through creating co-constructed micro-narratives of resistance.

Seeking some robustness in sampling through rudimentary and informal triangulation, I used 'snowball sampling' (Goodman 1961) by asking my initial participants to suggest which colleagues to approach next as the first round progressed. However, I was aware that such convenience sampling was akin to 'inviting the stories you want in order to fit them into your own preconceptions or experiences' (Cousin 1999, 103). I wanted very deep and rich exploration of participants' views, which I hoped would be complex, but I could not be sure in advance which of them would yield the most suitable data. I decided on three rounds of interviews because I sought meaning and research direction *from* the interview discourse and this would allow for an iterative focus to my research design (e.g. participants could revise previous declarations and I could seek repeated patterns and themes across three rounds).



I therefore adopted a funnelling approach towards increasingly refined interviews (Appendix C). I started round one with 12 short, exploratory, unstructured and informal interviews (approx. 30-60 mins) to build on rapport and refine research direction that 'relies upon the spontaneous generation of questions' (Savin-Baden & Major 2013, 359). The six participants whose interviews were most relevant to the research questions were to be re-interviewed again in round two with longer, semi-structured and semi-formal interviews (60-90 mins) featuring more refined questions that are 'not as broad and free ranging as other forms of interviews' (Savin-Baden & Major 2013, 359). Finally, I planned to re-interview the three most communicative and idiographic of these (again, traits sought by NI researchers) with even longer, more structured and formal interviews (90-120 mins). In these final interviews I would have scrutinised the participants' stories more extensively than in previous rounds 'when the researcher has a well-developed understanding of the topic [...] after the use of observations or less structured interviewing' (Savin-Baden & Major 2013, 359). My original plan was that the three most comprehensive and idiographic stories that made it to round three would each be presented as longitudinal, unique participant stories of academic perceptions over a period of Ed Tech change. I hoped that each of these three stories would reveal some personal changes over time, refinement of previous declarations and reflection upon critical incidents between (and before) interview rounds that would also have something collectively to say about the HEI environment within which they were gathered.

The use of in-depth interviews allowed sufficient time for the consolidation of rapport and the articulation of complex ideas, clarifying ambiguity and achieving some

consensus as part of a live synchronous exchange akin to communicative rationality. I decided to record interviews with an unobtrusive digital recording device to minimise visual distraction and encourage more natural conversation. After professional transcription, I improved my familiarity with the data by checking for accuracy and adding nuance (pauses, hesitation, repeats) to obtain a more experiential version of the exchange since I wished to encode a reasonable amount of non-verbal data from the original exchange. In short, for transcription I was initially interested in *what* was said and, to a lesser extent, *how* it was said because sense-making of discourse cannot rely upon the literal utterance alone (as the latter stages of my transcript analysis allude to, see 3.11 below).

### 3.09 Negotiating the research cul-de-sac

Narrative Inquiry offered the opportunity to present the three idiographic participant stories of change longitudinally by creating narratives from data found at different junctures and by making narrative connections between interviews (Creswell 2015). I hoped that some critical incidents (i.e. an experience they can reflect upon that had significant impact) would take place between round one and two, or round two and three. I was seeking to illuminate ‘a lot about a little (problem)’ (Silverman 2006, 5) by prioritising depth of participant experience. Following participants longitudinally over three rounds allowed time to develop further rapport and trust with the hope that more critical incidents might be disclosed within the later interviews.

At this point in my research, I felt as though my emergent NI approach had become more problematic than helpful. Choosing NI as a ‘seductively simple’ (Kramp 2004,

113) approach now felt rather too flexible and insufficiently robust. As a consequence, I began to question my faith in the ability of NI to help inform a meaningful contribution to practice. In the conclusion of their Narrative Inquiry into academics adapting to the digital age, Cousins & Bissar (2012, 10) recommend the use of 'dwelling posts' where teaching professionals 'may rest awhile and tell or listen to warming, re-echoing stories about adapting to change and uncertainty, about adopting new technologies' (ibid). Whilst captivating, this was not the robust contribution to practice I was looking for and I felt increasingly uneasy about the prospect of justifying my NI within the formal examination process of my thesis.

Despite my ambivalence, I wished to retain a modicum of Narrative Inquiry in my research since I was committed to the illumination it could provide for a more interesting case study. I researched and tried several experimental techniques for re-storying interview transcripts into various interim texts, but I could not ascertain robust research value for NI. For example, the technique of 'narrative smoothing' (Polkinghorne 1995; Kim 2015) involves writing a subjective and engaging story about each participant but is not preoccupied with fidelity and has licence to omit important detail. I remained unconvinced of how this might have addressed my research questions or yielded anything substantive for practice. However, I did use narrative smoothing effectively as an interview prompt and *aide-memoire* for those re-interviewed in rounds two and three during my research (see Appendix E) to create what McCormack (2004) calls a 'personal experience narrative'.

Having conducted my round one interviews in an open and exploratory way, I felt it was time to make more meaningful sense of my data and refine my interviews for

round two and three. I decided to digitise my transcript coding, annotation and some interpretation into NVivo software. This was a considerable undertaking, but it allowed me to understand the case study afresh using powerful data exploration techniques (detailed below) that meant I could revisualise data and explore cross-transcript themes in ways not readily feasible with printed transcripts.

With my refining research design, progressively now eschewing NI, I approached round two interviews with some augmented criteria to see which participants should be invited for another interview. Having now left the HEI, certain round one participants (Ash, Eve, Greg – see Table 2, below) could not be re-interviewed because I had stipulated that participants had to be in employment to retain a consistency in worldview. The remaining nine participants were formally ranked in order of (a) the volume of story information they contained, and (b) how much of this was relevant to the now more refined research questions. The round one transcripts of the top six ranking participants chosen for round two were then to be subjected to ‘narrative smoothing’ (Appendix E, for example) to act as *aide memoire* and interview prompt for their interviews in round two.

**Table 2. Participant choices over three interview rounds**

Round 1 – Twelve 30 to 60-minute interviews	Round 2 – Six 60 to 90-minute interviews	Round 3 – Three 90 to 120-minute interviews
Ash	Bob	Bob
Bob		
Carl	Dee	
Dee		
Eve	Fay	Fay
Fay		
Greg	Hugh	
Hugh		
Ida	Jayne	Kim
Jayne		
Kim	Kim	
Lynne		
Short, exploratory, unstructured and informal interviews.	Longer, semi-structured and semi-formal interviews (4 years from Round 1).	Even longer, largely structured and formal interviews (1 year from Round 2).

After conducting the round two interviews I was disappointed to find that not a great deal had changed in the participants' lives since their first interviews. This led me to question the merit of longitudinal Narrative Inquiry to explore individual participant changes over time. However, as covered in 3.07, one approach of Narrative Inquiry is to present stories that are rarely heard. I decided for round three to re-interview three of the six already interviewed twice to attempt to elicit more narrative material. For the final round of questioning I approached participants in a more reflective, structured and probing way to see if my questioning technique might yield different data to previous rounds (Appendix D). This involved reflecting upon participant data from previous rounds, challenging some of their assertions with my new perspectives and following a more research question structured interview schedule. I was, once

again, left disappointingly bereft of critical incidents that might justify my NI approach.

I then applied Creswell's approach (2015, 539) to the coding and storying of transcripts to see if I could find some way of representing the three rounds of longitudinal interviews as a narrative journey of three different participants.

Creswell's approach is similar to 'narrative smoothing' and recommends coding transcripts to identify narrative cues related to declared problems, settings, actions, characters and resolutions. Once coded into these 'irreducible bare bones' (McFarlane 1996, 14) of the narrative, the researcher looks for thematic connection between the cues. Each of these thematic connections then forms the basis of a paragraph in the final story, which is 'creatively written with a view to summarising and careful interpretation' (Creswell 2015, 544) of the details. With this approach, the researcher can cautiously infer what the interviewee hints towards or implies but may not have overtly divulged.

This narrative smoothing could be seen as an attempt to 'activate narrative production' (Holstein & Gubrium 1995, 39) of enriched and constructed stories (McCormack 2004) but guidelines for doing this activity were abstruse at best. After attempting some narrative smoothing, I found that the themes associated with the three chosen participants (Bob, Fay and Kim) were fundamentally very similar to all the other participants. The second and third round interviews repeated many of their previous ideas rather than developing them. So, my NI attempt to 'seek out and give voice to these counter narratives' (Glover 2004, 67) did not seem to bear fruit at this juncture.

At this stage, it felt as though I had manoeuvred into a research cul-de-sac because within the time frame remaining for my research it was too late to gather more meaningful data and existing data did not return as expected. This was a very unsettling period, so I took solace in the suggestion that 'In understanding that both wisdom and uncertainty are states of being, we believe that one can lead to the other' (Savin-Baden & Major 2010, 3). Whilst perhaps not towards wisdom, this uncertainty did fortunately lead to an emancipatory direction.

### 3.10 Research epiphany

Had my NI 'narrative analysis' yielded the results I sought, my next step would have been to perform 'analysis of narratives' (Polkinghorne 1995) with a focus on intersubjective cross-participant patterns, themes and commonalities. I was aware that NI research advocated the production of 'interim texts' (Clandinin & Connelly 2000, 133) and there would be 'much revisiting and reshaping before the final write-up occurs' (Bold 2012, 122), so I decided to create some digital interim texts to see if this would prove illuminating in some way. I used a variety of analysis techniques in NVivo (e.g. hierarchy charts, cluster analysis, comparison diagrams, word frequency, source comparison) to get an overview of the data gathered. At this point I found that there were many more super-themes than I expected, so I decided it was appropriate to reorganise and re-interrogate the case study of perceptions more historically and thematically. Using NVivo to re-explore the existing data, I looked for node patterns and trends, absorbed existing nodes into wider tree nodes, combined similar nodes together, separated others and created new ones. I also immersed

myself in the original interview audio again in the hope that new insights might emerge.

After this period of very in-depth data immersion and re-exploration I realised that it might be more useful to organise my case study of HEI Ed Tech as a *phase*-based approach rather than *participant*-based approach. This is because there were more thematic connections among all 12 participants than stories and critical incidents affecting the three main participants (see Table 2, above) longitudinally. Each of the three interview rounds were serendipitously conducted shortly after an organisational phase of Ed Tech change, so participants' perceptions reflected liberally upon these phases of change anyway. Fundamentally, I was enticed by the idea that 'Analysis of patterns across interviews with similarly situated people contributes to a stronger understanding of those environments and their impact in individual narratives' (Chase 2011, 424). It was the potential for indirect access to these environments that appealed to me, particularly since such environments are where I believe the academic lifeworld may be communicatively regenerative and agreed intersubjectively.

Explored fully in 3.12, perhaps the most important critical incident for me was the very unexpected changes in professional circumstances that challenged my secondary critical lens and nuanced my role as insider researcher. Shortly before conducting round two interviews I was promoted to Principal Lecturer. Thereafter, quite unexpectedly, I was promoted again to Associate Dean shortly before conducting round three interviews. Hence, each round of data was captured at a different unforeseen career level and this had ethical implications for my changing



views of the participants, their views towards me, their data and my research. The new 'managerial' insights as a result of my career change also had implications for the evolving communicative rationality between myself and the participants. For example, the validity claims and consensus between myself and participants felt increasingly taxing by the time of the final interviews. This had an inevitable impact upon sense-making during the interview and what might have been extrapolated when interpreting the data later.

On reflection, I was much more politicised than I realised in my first participant interactions – which can be seen in the challenging ideas that I chose to underline as re-interview cues for Bob's *aide memoire* re-story (Appendix E). However, it was only when I changed that I could appreciate how narrow my initial views were because entrenched experience possibly 'shapes the individual's consciousness without them realising it' (Inglis & Thorpe 2012, 93). I was now experiencing for myself the challenges of senior leadership where addressing the academic voice is just one of many demands placed upon those in leadership. Ultimately, I remained committed to my original research intention to explore the under-represented academic voice, as justified in the literature review, even if some of my previous organisational views had now altered somewhat.

Whilst my final organisation role was probably as more of an outsider-insider as Associate Dean, I still had a rich heritage of research rapport and trust built up over two rounds of data collection. I also had a healthy working relationship with many participants prior to the research that I wished to maintain (see 3.12). Ultimately, I had developed more organisational and leadership insight by round three and felt

that my initial research design was too readily influenced by a shared critical agenda. My new organisational position potentially allowed for more discursive scrutiny on my behalf by the third round of interviews and especially during final data handling. Whilst my resulting thesis no longer features the longitudinal idiographic narratives of the participants I once sought, NI does provide a methodological basis for data gathering as well as illuminating my own transformative story in this chapter.

### 3.11 Final data handling approach

My final research approach was to conduct increasingly in-depth interviews to attempt to answer 'RQ2: How do academics articulate their perceptions of Educational Technology implementation in the post-1992 HEI?' These perceptions were then retroactively organised as three phases of change, to inform the overall case study of academic perceptions over a decade of HEI Ed Tech change. I decided to get deeper into data analysis to see if further interpretative meaning was possible. To explore data more comprehensively, I decided to perform in-depth multi-lens interpretation and analysis of the interview transcripts and needed 'some basic tools (heuristic devices) [...] to go beyond the ostensible or most obvious content' (Elliot & Sarland 1995, 37), detailed next.

I was drawn to the analytical opportunities, rather than the epistemology, of Interpretative Phenomenological Analysis (IPA) to explore my data. Whilst NI and IPA share the focus upon investigating phenomenon, IPA sees this phenomenon as more essentialist whereas my version of constructionist narrative inquiry deems the phenomenon more socially grounded. IPA analysis recommends repeated re-

reading of printed transcripts, in-depth interpretation and time-consuming multi-pass annotation and coding of specially formatted and printed transcripts (Smith et al. 2009; Gil-Rodriguez & Hefferon 2013). IPA had some well-formulated heuristic rules for data analysis, such as a progressively more complex transcript annotation for in-depth interpretation (see Appendix F). Whilst the epistemological roots of IPA were somewhat incongruent I was drawn to the idea that: 'Whatever helps practitioners to develop a reasoned capacity for action in the service of their educational values will do. Methods will be selected in the context of practice as the situation unfolds' (Elliott 2006, 178).

I considered other techniques for performing in depth transcript analysis, not all of which can be presented here due to word limitations. For example, Braun and Clarke (2006, 24) state that 'your analytic claims need to be grounded in, but go beyond, the surface of the data, even for a "semantic" level analysis'. Such an approach looks for the underlying meaning and implicit norms within data whereby 'the interpretation brings forth something new – something not apparent in the surface of the text' (Josselson 2011, 228). In short, this was a way of scrutinising beyond the surface of the data and seeing what was *implicitly* informing participant perceptions. This might have been important if there is substance to the idea that 'lifeworld, made up of typifications embedded generally invisibly in practical consciousness, shapes the individual's consciousness without them realising it' (Inglis & Thorpe 2012, 93). This is compounded by the possibility that 'interviewees do not explicitly mention the issues of importance to the researcher' (Daiute 2014, 16). In short, the suggestion here is that robust analytical tools might be able to unearth meaning that is neither

obvious to the participant nor to the researcher, either at the time of the interview or within the final transcript.

The final analytical approach was to examine each interview transcript individually and completely anew in terms of what *new* codes emerged, given that the case study was now structured around phase-based Ed Tech changes rather than participant-based changes. None of the following passes of transcript annotation (adapted primarily from Gil-Rodriguez & Hefferon 2013 and partly from Daiute 2014) that I adopt are mutually exclusive, in fact each annotation pass is likely to encroach upon more than one category below:

- 1) 1<sup>st</sup> pass *basic* annotation (black pen). Open-minded emergent and exploratory coding with a focus upon content analysis, where free comments and ideas are written to the right-hand side of the text. This is 'whatever comes to mind' free flowing ideas and notes that are usually descriptive and focus upon WHAT is said. You may comment on things that surprise you, seem important and/or address the research questions.
- 2) 2<sup>nd</sup> pass *interpretative* annotation (blue pen). Builds upon the 1<sup>st</sup> pass and notes and focuses upon more interpretative and creative engagement with the text/person/process and any underlying meaning (i.e. not obvious at first). Here you might notice more of the subtleties within the dialogue transcript when looking at HOW things are said.
- 3) 3<sup>rd</sup> pass *performative* annotation (green pen). Develops the first two passes and considers more closely the performative aspect of the dialogue by looking at "who" an utterance may be directed to, "when", and "why" that is, for what purposes?' (Riessman 2008, 105). Since 'Performances are expressive, they are performance *for* others' (Riessman 2008, 106) and we are 'forever composing impressions of ourselves' (ibid). Wells (2011, 33) calls this '*narrative performance* [which] focuses on the broad way in which a story is told' (Wells 2011, 33). An example might be when a manager maintains professional spoken conduct about something that he/she privately despises, or when participants consciously avoid controversial disclosure since they feel that they might be identifiable.
- 4) 4<sup>th</sup> pass *ideological* annotation (red pen). What Daiute (2014) calls values analysis which is broadly like Foucauldian discourse analysis (Arribas-Ayllon & Walkerdine 2008). Here we might deconstruct the ideological text, search

for hidden power relations and agendas that inform the text, consider what is left unsaid and ask if alternative wording of the same information would result in a different discourse being privileged.

All four passes invite free, open-minded annotation from the researcher and once the researcher is exhausted of ideas (i.e. saturation point) the annotation phase is complete. My aim was to use several different analytical approaches to explore the data and arrive at new and illuminating meaning that goes beyond the layperson's reading of the obvious. IPA analytical frameworks, entirely compatible with narrative research texts, expect the researcher to ruminate upon their annotations and repeatedly ask: 'So what? What does this mean?' (Gil-Rodriguez & Hefferon 2013) as a prompt to encourage further interpretation. The next stage was for me to write keyword-led summarising codes on the left-hand margin of the page based upon my multi-pass interpretative annotations (see Appendix F). This is done to categorise the emergent themes from the data, creating a higher level of abstraction and interpretation that might help to later re-organise the data within a thesis.

Finally, following the idiographic coding detailed above, I highlighted the transcript in different colours with one colour representing each research question addressed. Analysing in this way allows for the emergence of original and interesting insights into the material unfettered by any preoccupation with the research questions initially. The summarising codes originally written to the left of the transcript (see Appendix F) can then become new emergent codes applied to the electronic transcripts in NVivo. Digitising transcripts and codes using NVivo allows for an enhanced overall understanding of the whole data set and provides multiple data examination tools to re-envision and re-explore existing findings.

### 3.12 Ethics, credibility and rigour

Although ethical considerations are apparent in many reflexive sections of this thesis, here I consider the main ethical implications of my insider research. My internal research ethical clearance has already been covered in section 3.08 and detailed in Appendices G and H. However, my personal ethical commitment to my colleagues remains to this day over and above the assurances made within these formal documents. As Floyd & Arthur (2010, 3) reflect on their own insider research: 'we were particularly vigilant to ensure each individual's anonymity. Indeed, because we knew our participants, we went to great lengths to ensure they were "protected", more than any ethics form or university policy procedure could achieve.'

Having received ethical clearance from the university and assured participants of my ethical approach as an insider senior lecturer, I conducted most of my research at higher organisational positions. One problem was that only I could really know if my data informed any other organisational spheres (e.g. team meetings where the participant is present) and if I remained committed to my original participant assurances in my new organisational role(s). This ethical dimension of changing from an 'insider' to 'insider-outsider' as the research developed was potentially very troubling, possibly because 'relations are more complex for insider researchers' (Floyd & Arthur 2010, 4) when one is more senior than the other. For example, there were indeed expositions to me that were troubling to me in my new role, with such utterances likely to 'raise eyebrows' within another context (i.e. 121 staff meeting).

Costley *et al.* (2010, 33) suggest that insider researchers 'should avoid putting people in a difficult position because you are a friend or colleague'. My dilemma was that I knew most participants well and didn't wish to compromise them in any way, but I also felt that their candour would be helpful to my research. My inability to distance myself from the research meant that I could have brought harm to my consequently identifiable participants. Having encouraged participants to be candid during round one, I could have made my participants vulnerable in the context of a potentially identifiable HEI. Since I conducted round one as an 'empathetic interviewer' in which I am 'an advocate and partner in the study' (Fontana and Frey 2005, 696), this may have also curtailed the more robust questioning required for the genuine inquiry that I sought. These matters are accentuated if some participants felt obliged to provide an interview for me as a long-term colleague in round one, or if round two and three participants feared the repercussions of rejecting my request for follow-up interview as a senior colleague later.

In addition, my new organisational position had methodological and ethical dimensions to the point that I was left questioning: 'Who owns the story, the researcher or the participant? What happens when there is disagreement on interpretation or analysis? What are the ethical boundaries in telling the story – to edit or not to edit?' (Johnson-Bailey 2004, 138). With my organisational position also in flux during thesis completion, I had contemplated a redacted version of the more critical themes of this thesis due to the harm it might do to my own career as a 'complicit' co-constructionist of participant data. In the end, I concluded this would be disingenuous (perhaps even unethical) for the pursuit of genuine inquiry: I had already informed my research participants that I was seeking their help to improve

organisational change and the thesis concludes with an entirely principled contribution to knowledge and practice that transcends the original criticality.

I conducted my research with the simple internal logic that asked: if someone approached a member of my family to be a research participant, how would I like the researcher to work with them? For example, I diligently sought participant approval of their anonymised interview transcripts, hoping this would build further trust for follow-up interviews. An unexpected development was that one participant requested the removal of around ten per cent of their transcript data due to contentious disclosure they later regretted. I really wanted to keep this revelatory data but never at the expense of my personal integrity, ethical commitment to my colleagues and our ongoing professional relationship. By acquiescing to this participant request I maintained our relationship of mutual trust, allowing me to secure another interview because 'pragmatism may outweigh candour' (Mercer 2007, 8) in situations like this.

Regarding credibility, since working on a large case study is likely to be 'all-consuming for the researcher' (Hays 2004, 234), the reader must have confidence that the research is robust and not just drawn to the verification of existing beliefs, which I have attempted to declare reflexively throughout this thesis. The disadvantage of case studies is that they tend to be preoccupied with verification and researcher preconceptions, with a large amount of material for a lone researcher to present in a final report (Wellington 2000, 95). Someone else applying my definitive research approach might produce different findings, but my paradigm welcomes such difference as opportune rather than erroneous.



Ultimately, despite the challenges of my research journey, as an insider social constructionist I maintain that 'Research from within is different to, not better or worse, than, other forms of research' (Smyth & Holian 2008, 33). Most importantly I believe 'There is really no such thing as pure objective observation of much human behaviour in real work situations, regardless of whether the research is conducted by either external researchers or researchers from within' (Smyth & Holian 2008, 37). My role was to generate participant stories co-constructively and this intersubjective knowledge is a major feature of the research, not an aberration.

Credibility might arise from not over-claiming what research of this scale might achieve, which is why I recognise the need for further research in section 6.3 of the conclusion. Mercer (2007, 11) argues that insider researchers tend to 'assume their own perspective is far more widespread than it actually is' though I intend to be 'tentative (hesitant) about making broad application of the findings because realities are multiple and different' (Lincoln & Guba 1985, 42). In addition to this, Cousin (2009, 9) corroborates that interpretivist findings are 'inherently too unstable for reliable predictions to be made'. As such, whilst generalisation is probably rather optimistic and belongs to a different research paradigm, the possibility of my research being relatable elsewhere conforms to my interpretivist leaning. I also aim to generalise to theoretical propositions rather than empirical generalisation (see discussion chapter).

Other scholars have alluded to different forms of generalisation associated with interpretivism. Bassey (2001) uses the term 'fuzzy generalisation' to describe a proposal garnered from research conclusions that is expressed tentatively and may

be true in *some* circumstances, for example. Bassey (2001, 12) argues that 'Research can inform decision-making, not determine it' and that fuzzy generalisations 'enable researchers to make predictions of value to teachers and to policy-makers without compromising the researchers' ethic of seeking truth'. In short, my 'inference is of a different kind' (Riessman 2008, 13) compared to standard generalisability. Given that my research involved relatively few participants, my data might be seen as limited. As such I declare that my approach 'does not strive to produce any conclusions of certainty, but aims for its findings to be "well grounded" and "supportable"' (Webster & Mertova 2007, 4). If my research can be seen as robust in this way it can also be used to explore similar matters in other HEIs.

The reliability of my research is a complicated matter for reasons already discussed. Some reliability emerges from my honest exploration of my research journey: 'Knowing why we make the decisions we do is what lends our research validity and credibility' (Luttrell 2010, 4). My 'reflexivity as introspection' (Finlay 2002, 213) permeates this and many other chapters of the thesis. Alvesson and Skoldberg (2009, vii) call this 'interpreting one's own interpretations' and Etherington (2004, 32) believes this 'enhances the trustworthiness of the findings and outcomes of research'. However, it does not necessarily follow that researcher honesty leads to the trustworthiness of the findings.

One troubling aspect of my research is the potential charge of 'cherry picking' participants, since I initially sought to reinforce my secondary critical lens with my initial participant choice. However, even during this early entrenched period, I extended interview invitations to include two non-academic participants with a view

to obtaining different perspectives. I believe that my new organisational perspective allowed my final round of interviewing to be more robust, critical and probing (see interview schedules in Appendix D). My new organisational perspective enhanced my scrutiny of the original exchanges of interview data in round one, which hopefully somewhat ameliorates the charge of participant cherry picking during data collection.

Perhaps the most important device for credibility is the Habermasian conceptual framework of communicative rationality that allowed the force of the better argument to prevail during participant interviews. I would argue that this offers the possibility of discursive intersubjective veracity to ensure some level of believable *verstehen* within the research. According to Bohman (2014, 7) 'validity involves a notion of correctness analogous to the idea of truth [whereby] a claim (statement) merits the addressee's acceptance because it is justified or true in some sense'. As such, validity claims are not to be confused with appeals to empirical truth: instead they are more relativist constructs that are justified by an agent (e.g. participant) and then considered by others who might agree or challenge them (e.g. interviewer) and offer some of their own validity claims in return. Consensus of different validity claims might then be reached as part of the interview dynamic and I would argue that such intersubjective agreement provides some level of credibility to the exchange and, by consequence, this research.

### 3.13 Conclusion

This chapter reflexively chronicled my research journey from methodological uncertainty, bordering on agnostic, towards methodological enlightenment through

iterative reflexivity. It demonstrated the importance of reviewing the suitability of an emergent research process and being prepared to make changes if things do not go to plan. It culminated in a relatively straightforward case study and detailed thematic analysis approach, but this was informed by the data collection and textual analysis of Narrative Inquiry, combined with the in-depth multi-lens analytical approach of Interpretative Phenomenological Analysis. Handled carefully, with my more balanced organisational perspective at the point of data analysis, this approach has the potential to make the thesis findings and discussion richer through the 'intersubjective veracity' of consensus amongst a particular community of practice (Wenger 2000).

I maintain that my initial methodological openness allowed my final approach to be more responsive to the data findings as they transpired, though this precarious strategy did potentially threaten the robustness of my research. I believe unequivocally that declaring my journey of enlightenment is more ethically responsible than trying to conceal it. I evolved from an entrenched researcher trying to prove a point towards one who is trying to understand something as a result of a more nuanced and balanced organisational perspective. By declaring the process through which I might have influenced participant perceptions (RQ2) I can also consider more carefully the most appropriate conceptual framework for addressing (RQ3). However, before this, the findings chapter will present and interpret the data itself.

## Chapter Four: Findings

### 4.0 Introduction

As discussed in the literature review and research design, the purpose of my research is to apply a Habermasian conceptual framework to explore and operationalise academic perceptions of Educational Technology. To recap, the research questions are:

RQ1: How has the role of Educational Technology developed in the post-1992 HEI?  
RQ2: How do academics articulate their perceptions of Educational Technology implementation in the post-1992 HEI?  
RQ3: How might academic perceptions be used to influence implementation of HEI Educational Technology?

With RQ1 largely addressed by the literature review, this chapter concentrates mostly upon RQ2. My findings are organised as a case study of academic perceptions of Ed Tech over three specific phases of HEI change within a decade at the host HEI: Blended Learning 2008-09, VLE Review 2011-13 and Digital Campus 2015 onwards. Using 21 interviews with 12 members of staff (see Appendix C for participant biographies) my interpretation of their perceptions was distilled into major themes associated with each of the three phases of change, expressed as sub-headings in this chapter (see Table 3 for summary, below). On occasion, this chapter incorporates reflexive consideration of my unforeseen changing organisational role because I believe it is more intelligible contextualised herein rather than retrospectively considered in the subsequent chapters. The main participant themes are summarised next and then later developed in more detail throughout this chapter.

Within the formal change of the Blended Learning (2008-09) era, the prevalent themes shared by participants were: suspicion towards Ed Tech due to a perceived lack of evidence, cynicism that Ed Tech was being used primarily as a tool for organisational efficiency, feelings of displacement due to the lack of consultation before Ed Tech implementation, resistance towards the systematic intrusion of Ed Tech into academic practice, and concerns about the well-being of staff and students as part of a culture of 'always online' connectivity expectations.

Within the political change of the VLE Review (2011-2013) era the prevalent themes shared by participants were: protectionism towards existing Ed Tech rooted in negative perceptions of onerous Ed Tech innovation, a lack of confidence in Ed Tech leadership and dismay that Ed Tech procurement appeared motivated by financial rather than pedagogic rationale.

Within the collegial change of the Digital Campus (2015 onwards) era, prevalent themes were: recycled legacy concerns from the previous two eras as well as aversion to the unknown (at the point of data collection). However, unlike in previous data rounds, participants expressed some *optimistic* perceptions of Ed Tech change in this final era with some participants now revising their premature critique from previous interviews.

The basic participant biographies and the themes they contributed to are summarised in Table 3 (full biographies in Appendix C). As can be seen, three participants contributed to all three phases of change (Bob, Fay, Kim), three

participants commented on the first two phases of change (Dee, Jayne, Hugh) and three commented on only the first phase of change (Carl, Ida, Lynne). Finally, three participants were in a position to provide a more nuanced view on Ed Tech (Ash, Eve, Greg) and did not express any of the prevalent pathological themes detailed below. These latter three, coincidentally, left the HEI after round one of interviews and could not therefore be re-interviewed. Within Table 3, light grey cells represent an area it was impossible for participants to comment on. For example, it would have been impossible for Carl to have known about the Digital Campus project that took place years later. Finally, the darker grey cells of Table 3 represent data based on 'privileged' access: as part of Jayne's wider pan-university duties she was party to early insight into Digital Campus plans during round two and could comment on it.

As will be covered in the discussion chapter, there appeared to be some interconnected development in the organisational approach to change, participant perceptions and my own fluctuating organisational role. Most of the prevalent themes listed above are interpreted as an example of a relevant Habermasian pathology (see 2.2.6) to help categorise the critical perceptions. Later the concept of values, first alluded to as the semantic antonym of pathologies in the literature review, is returned to in the subsequent discussion chapter (sections 5.02 and 5.03) as crucial to the overall contribution to practice.

**Table 3. Basic participant biographies and themes of each Ed Tech phase**

Participants		Phase 1: Blended Learning (2008-09)					Phase 2: VLE Review (2010-12)			Phase 3: Digital Campus (2015 onwards)		
<p>Below each participant name is the number of rounds they were interviewed for.</p> <p>A black square represents which theme each participant contributed to.</p> <p>A light grey square represents 'unknowable' knowledge for participants (e.g. Hugh was interviewed for 2 rounds and knew nothing about Digital Campus so could not comment).</p> <p>A mid grey square represents 'privileged' knowledge for participants (e.g. Ida was only able to comment on the VLE Review since she had early access to it due to her role).</p> <p>Ash, Eve &amp; Greg expressed negligible pathological themes.</p>		4.1.1 Suspicion arising from lack of evidence	4.1.2 Cynicism fuelled by ulterior motive of efficiency over academic practice	4.1.3 Displacement due to lack of consultation	4.1.4 Resistance due to Ed Tech challenging academic practice	4.1.5 Concerns over lecturer & student wellbeing due to 'invasive' Ed Tech	4.2.1 Protectionism towards existing technology	4.2.2 Lack of confidence in internal Ed Tech leadership	4.2.3 Distaste towards neoliberalism rooted procurement	4.3.1 Apprehension due to Ed Tech change legacy	4.3.2 Aversion towards the unknown	4.3.3 Expressing hope and optimism
<b>Bob</b> (3)	Early 40s, a senior lecturer with over a decade of service for a number of subject areas. He prefers bespoke Ed Tech that is rooted in pedagogic rationale and symbolic exchange.											
<b>Fay</b> (3)	Late 40s senior lecturer. A once e-luctant colleague that has now forged an Ed Tech career based upon her innovatory approaches to teaching that have attracted national attention.											
<b>Kim</b> (3)	Early 50s has adeptly explored Ed Tech from a number of perspectives. She believes people and pedagogy should drive Ed Tech, not technological rationality and encourages tech experimentation.											
<b>Dee</b> (2)	Late 50s outspoken senior lecturer with a wider remit for informal pedagogic leadership. Objects to 'one size fits all' strategy and believes Ed Tech is sometimes distracting when teaching students.											
<b>Jayne</b> (2)	Late 40s senior lecturer. Keen tech enthusiast but doesn't endorse most top-down approaches. Objects to efficiency sought through technology and prefers a 'bottom up' approach to change.											
<b>Hugh</b> (2)	Early 50s senior lecturer with 2 decades of service who rejects the 'very blinkered' changes from 'top down' but also considers himself 'more luddite than anybody' with Ed Tech.											
<b>Carl</b> (1)	Early 50s senior lecturer with 20 years of service. Dislikes the increased admin burden placed upon academics (through Ed Tech) and criticises the scholarship of internal Ed Tech leadership.											
<b>Ida</b> (1)	Early 60s senior lecturer with a relatively enthusiastic and 'apolitical' view of Ed Tech in the HEI. A strong advocate of dialogic 'exchange' between leaders and academics during change.											
<b>Lynne</b> (1)	Early 60s senior lecturer with 20 years' service and a (wrongly) self-declared 'technophobe'. Avoids technology, especially when it is onerous to adopt, but is adept nevertheless.											
<b>Ash</b> (1)	Early 60s principal lecturer advising on Ed Tech use at school level. Disaffected and despondent, due to impending retirement, but didn't express pathological themes as expected.	Ed Tech academic facilitator (school specific)										
<b>Eve</b> (1)	Early 40s long term Ed Tech facilitator working closely with academics to arrange for stronger connection between 'bottom up' and 'top down' initiatives. Quite positive and balanced about tech.	Ed Tech trainer (school specific)										
<b>Greg</b> (1)	Late 50s former practitioner turned Ed Tech senior leadership, with a remit to inform pan-HEI strategy, implementation, evaluation and improvement of Ed Tech. Very positive about tech and his role.	Ed Tech senior leader (pan HEI)										



#### ***4.1 Phase One: Blended Learning (2008-09)***

In 2008 University Executive undertook an institution wide portfolio review, that will be referred to as the pseudonym 'Learning Perks'. This changed the existing 15 credit modular weighting to 20 credits and reduced the total number of modules taught by around a quarter. In line with other HEIs at the time, this change was rumoured to have assisted institutional efficiency by reducing the number of modules that required administrative support, physical accommodation, timetabling, etc. However, this formal pan-University initiative represented a considerable reduction in module choice for students and it proved unpopular amongst academic staff who perceived it as senior management encroaching upon their academic practice.

Concurrent to this change was the university-wide implementation of a new Blended Learning strategy, aiming to seamlessly combine physical approaches to teaching with digital methods. This Blended Learning era mandated specific student entitlements (e.g. electronic assignment submission and feedback, a minimum proportion of module delivery online) and introduced the idea of a regular weekly 'blended learning hour' wherein one hour of module teaching was delivered exclusively online. Over time, blended learning was increasingly advocated by University Executive as being equivalent in status to traditional and synchronous face-to-face teaching, though some academics saw it as an inferior substitute for their preferred face-to-face teaching methods.

The strategic conflation of two change processes meant that the initiatives were perceived as inextricably connected by participants and seen as a panacea for saving costs. Whilst cost saving is an important operational concern in any modern organisation, when financial imperatives become the primary (systemworld) driver over academic (lifeworld) practice this appears to be anathema to academic values, as the data below implies. The following data was largely captured through interviews with all twelve participants in round one (Ash, Bob, Carl, Dee, Eve, Fay, Greg, Hugh, Ida, Jayne, Kim, Lynne) though some data was also derived from comments from the six participants of round two (Bob, Dee, Fay, Hugh, Jayne, Kim). All participants were long serving senior lecturer academics, apart from Eve and Greg, with full biographies included in Appendix C and a summary in Table 3 (above).

#### **4.1.1 Suspicion arising from lack of evidence**

Some participants were suspicious of Ed Tech because of the perceived lack of evidence and rationale presented by management for its pedagogic potential. In response to interview questions about the implementation of blended learning, three of the twelve participants complained about a lack of evidence for adopting blended learning. Carl, an experienced senior lecturer, suggested that “the evidence that blended learning works is scant” and requested “evidence [that] students are demanding this?”. The lack of robust evidence that Ed Tech improves learning or student results has already been addressed in the literature review (Loveless & Williamson 2013; Mumtaz 2000; Reynolds *et al.* 2003; Selwyn 2011).

Bob stated that academics need to be “persuaded of the pedagogical and intellectual rationale for whatever’s being proposed” because “if we presented our stuff to journals with this level of erm research we’d be rejected out of hand”. Six of the twelve participants suggested that they wanted the opportunity to discuss new Ed Tech initiatives before they are procured and implemented: “we are trained to debate, so when somebody says, ‘do this’ well ‘come on, what’s the evidence, why?’ so it’s natural isn’t it?” (Jayne). Bob agreed that “we need a far more, erm, critical approach to these things than just, erm, blind enthusiasm for whatever’s flavour of the month” and believed that too often there was an “unquestioning acceptance of absolutely everything that comes along” by management. So, in relation to academic experiences of Ed Tech (for RQ2), half of the participants expressed resistance due to the perceived lack of evidence, with two participants requiring more robust justification before being willing to accept ‘top-down’ change.

As addressed in the literature review, pathologies can emerge when the systemworld becomes too powerful and encroaches upon the lifeworld. The participant perceptions articulated might be underpinned by what Habermas calls the pathology of anomie (decrease in shared meanings and mutual understanding) because the mutual understandings in the academic lifeworlds are perceived as different to those in the systemworld. During the Blended Learning era participants wanted more evidence to justify change, the absence of which perhaps gave rise to the pathology of anomie on this occasion.

#### 4.1.2 Cynicism fuelled by the ulterior motive of efficiency over academic practice

Participants were cynical that Ed Tech was being used as a tool to improve organisational efficiency rather than as a means to support their academic practice; a perception that was reinforced as one university satellite campus was concurrently closed during this phase of change. As a consequence of this, Dee explained that “what a lot of us suspected is that there was pressure on rooms and they actually wanted a system where you would not use the rooms every day of the semester”. Dee felt that these changes were not in the best interest of students: “so students are entitled to 48 hours class contact but there’s only rooms available for 24 so the rest is by blended learning [...] but it’s not class contact.” Jayne expanded upon this view, shared by four of the participants:

“The idea of the blended learning ‘hour’ was introduced with the revalidation of the curriculum at the same time that we were closing down campuses so there was less teaching space. So, the very obvious driver for it was that we do not have enough classrooms to teach the students, so we’ve got to do it online. And, you know, bummer the fact that the students might not have Internet access at home and we have not got enough PCs for them all on campus and they might not have a computer, you know, at home. Erm so yes, it is very, it is sinister in a sense, in a way yeah” (Jayne).

Hugh argued that such efficiency, however business critical, was appropriated by management “as a way to trim costs”. Such efficiency was treated with suspicion by Bob: “this word ‘efficient’ I think is frightening [...] I think quite often it’s a means of cutting corners, of cutting down on face to face contact erm, saving on rooms, saving on staffing”. Carl believed that blended learning “was smuggled in under the cloak of [Learning Perks]” through the Blended Learning era, negatively alluding to a covert conflation of both initiatives. Bob later suggested that “as long as people feel these

things are not just being imposed for some other purpose [...] I think people would be more interested". This implies that negative perceptions *around* Ed Tech appropriation, rather than direct experience and use of technology, might have affected participant willingness to consider Ed Tech for their academic practice.

Participant concerns about Ed Tech appropriated for efficiency might be considered reasonable given that HEIs are operating in increasingly challenging economic circumstances. Deem (2004, 292) argues that HEIs are now 'finding effective ways of dealing with larger student numbers and running more complex organisations' to manage and support the higher volumes of cohorts now accessing HE. An important role of the HEI systemworld is to preserve the financial health of an organisation, which ultimately impacts all stakeholders. From his background as part of the VLE project at the Open University, Weller (2007, 8) suggests that 'e-learning is the most convenient option' for HEIs that need to cope with the increase in student numbers. Again, this suggests there are systemworld motivations that might take priority over pedagogic rationale when implementing Ed Tech.

If efficiency measures were perceived to have taken precedence over the academic practice of participants, then this might have led to another example of the pathology of anomie (decrease in shared meanings and mutual understanding). This might be since academics appear to expect a certain level of autonomy over their academic practice; autonomy that could be challenged when systemworld preoccupation with efficiency affects lifeworld functionality. According to Trowler (1998, 39) 'efficiency gains never really happen if the concept is pushed too far' suggesting that there might be some limits to the pursuit of efficiency.

#### 4.1.3 Displacement due to lack of consultation

Some participants (four of twelve) felt displaced by the formal change process of Blended Learning because management did not consult with academics prior to implementation. Whilst initially reticent about adopting the term, Bob increasingly embraced his role as academic 'expert': "I used to be very, very wary of even approaching the idea of, that we're experts, but now I think it's really important." Ida suggested that academic expertise is undervalued: "It would be much better if they came to the people with the blackened faces [...] but they never do." Instead the participants expressed feelings of academic displacement, exemplified by Carl: "the blended learning strategy was like that, you know, we were not given opportunities to critique it". These participant views imply that academics should be actively consulted during times of change and allowed the opportunity for critique.

As a university-wide Ed Tech leader during the Blended Learning era, interviewed for a more nuanced view on Ed Tech change, Greg preferred formal and authoritarian change associated with measurable outcomes and authority rather than more tentative approaches to change. Greg accepted that with technological innovation there is "a better chance of it working if you [academics] have some ownership of it" but he also maintained that large and complex HEIs cannot consult over everything. In relation to strategy formulation without consulting academics, Greg concluded that "I'm not paid what I'm paid *not* to be able to make a good stab at that". Hence, whilst Greg appeared to recognise the importance of academic input, he alluded to a professional preference for formal leadership instead.

Three of the participants shared perceptions that indirectly challenged the formal change approach preferred by Greg. Eve, in her capacity as blended learning co-ordinator, believed that “there has to be institutional strategies for things, I just think it’s... it can be dangerous to think that that’s the *only* way to sort of lead innovation.” She suggested going for “top-down meets bottom-up, bit in the middle” akin to what Trowler (1998, 154) called a ‘change sandwich’ approach. Kim supported the idea of a communicative third space, which she terms as the ‘middle’, because “That’s where most, that’s where mostly everything happens, in the middle, because nobody’s afraid”. For Ida, this third space is crucial for discussion between leaders, implementers and end users of Ed Tech: “it always has to be an exchange, otherwise it does not work”.

By contrast, Kim declared tacit support for occasional systemworld-led change: “so I’m kind of, you know, I’m stuck in-between. I don’t like somebody telling me what to do and what tools to use but I also don’t like sitting on top of the wheel and thinking [...] ‘do I need another wheel for my car?’”. In some ways, Greg was a hierarchal Ed Tech leader and some of the participants appeared to prefer a less authoritarian approach. Albeit focused on school leadership, Harris (2005) believes distributed and hierarchal forms of leadership are compatible, yet Bush’s (2011, 89) view is that ‘distribution can work successfully only if formal leaders allow it to take root’. This implies more of a dialectic than a dichotomy between Greg and the academic participants, although it may be systemworld leaders such as Greg that might ultimately furnish participants with the resources and spaces that are required to seek intersubjective agreement during the consultation phases of change. The

importance of senior leadership in facilitating change is developed within the steering committee section (5.08) of the discussion chapter.

The perceived lack of consultation apparent in the data might be explained by the Habermasian pathology of alienation (increase in people's feelings of helplessness and lack of belonging). The participants appeared to indicate a preference for involvement via consultation and were concerned that their expertise was being unduly dismissed during the Blended Learning era. The suggestion taken up in the discussion chapter is that consultation can *increase* this sense of organisational belonging.

#### 4.1.4 Resistance due to Ed Tech challenging academic practice

Once blended learning was ratified and increasingly assimilated into teaching practice, six of the twelve participants perceived it as systematically intrusive into their academic practice. Perhaps one reason for this was the 2008 mandate within the University's blended learning strategy that twenty-five per cent of all teaching should be delivered as blended learning in addition to face-to-face teaching. Fay perceived this mandate as managerial intrusion and resisted accordingly: "As soon as it starts to be imposed the joy goes out of it [...] academics just go [whispers: fuck 'em]". Later, Fay declared that "academics don't like being told what to do" suggesting that formal mandate is not an effective way to engage academics during change. Dee resisted because she perceived a challenge to her autonomy: "you employ a lot of fairly clever people [...] and then you ask them to do as they're told without the exercise of any professional judgement?". Interestingly, Bob expressed



concerns around how the teaching of potentially sensitive material may even prove detrimental to the reputation of the University if practitioners are increasingly obliged to deliver online as a result of HEI policy mandate:

“The class I did yesterday, which was on a popular novel from the seventies, it was, it had an awful lot of sexual content and it had a rape scene, and we discussed it at length, with some very different perspectives. And I did find myself thinking, if that had been conducted on social media or on technological media, the nuance wouldn’t have been there” (Bob).

Whilst it may well be possible to deliver such topics sensitively online, Bob’s concerns were based on what happens if the controversial content is taken out of context and shared outside of what he perceives to be the ‘safer’ space of empathetic exchange in a classroom. Bob explained that “technology works as a scaffolding [...] the actual educational moment happens face to face”, once again associating Ed Tech with distance learning. He expanded on this: “I’m resistant to allowing technology to replace classroom interaction because it does ossify the exchange. It makes it far more predictable and I think predictability is a form of death.” Bob’s forthright view indicated a preference for a live, face-to-face and unpredictable exchange (not dissimilar to communicative rationality) between teacher and student that he believes could be diminished by broad-brush management mandates for Ed Tech engagement.

One tension around Bob’s view is that there can be legitimate systemworld imperatives for encouraging wider adoption of Ed Tech. For example, an institutional software licence fee might be fixed regardless of how many staff or students use it. In such a case encouraging wider usage, even a selective mandate, might help to justify the initial outlay and ongoing costs. However, a mandated approach to

adoption might be resisted because it can challenge academic preference for a 'live' physical teacher-student exchange: "How are you going to change the dynamic of what you're doing according to the needs of someone, when you can't see their facial expression?" (Bob). Fay also wanted freedom to pursue her own bespoke teaching approach: "you can talk about pedagogy generally and, thank you, that's interesting but I want things that work for *my* area." These ideas suggest that monolithic approaches to change are not helpful to those who seek more bespoke Ed Tech engagement.

Fay objected to the data security driven "walled garden" of HEI control – restrictions that she proactively sought to circumvent by using non-proprietary and bespoke technology platforms in her teaching. She believed that "university policies, they're quite cautionary. They are designed, in theory, to protect but the danger is, they inhibit". She explained that "if somebody does want to try out a particular say social media, it's out there. And it's almost like, why would you need to ask permission of somebody within the university?" so there's "too much caution, you know, nothing I suppose is likely to impede just having a go, you know, giving it a go". Fay therefore positioned herself as recalcitrant towards pan-HEI approaches to Ed Tech implementation (RQ2) and preferred bespoke subject-based Ed Tech exploration to support her academic practice.

This aversion to Ed Tech intrusion might be connected to expectations of professional autonomy as lecturers in HE. Eve, an Ed Tech facilitator who worked alongside academics, believed: "staff are the key in my opinion" and they should "have the freedom to choose what is the most appropriate technology for their

purpose” rather than being encouraged to use certain platforms, perhaps because ‘academics are clever people’ (Trowler 1998, 55). Luke (2002, 257) suggests that manifestations of Ed Tech are treated with suspicion by academics because its ‘practices undercut the personal sovereignty of professors’ since ‘ICT diminishes the role of the teacher’ (Levidow 2002, 238) into ‘academic labour’ (Benson & Harkavy 2002, 205). In this sense, the academic becomes more of a facilitator rather than educator possibly since the ‘status, class and power position of the academic profession has declined over recent years’ (Trowler 1998, 44). In a critique of the UK higher education system, Hussey & Smith (2010, 130) argue that ‘academics have seen their autonomy diminished’ over time. Arguably, the impact on systemworld-led Ed Tech academic practice might be one mechanism by which this happens.

The data suggests that the increased pressure to incorporate Ed Tech might have been stymied since participants perceived it as intrusive upon their preferred academic practice. Again, I would argue that the Habermasian pathology of anomie (decrease in shared meanings and mutual understanding) is evidenced here.

*Institutionally*-endorsed Ed Tech was therefore seen as incompatible with the academic practice of certain participants, especially amongst those that felt a rich diversity in teaching preferences cannot readily be standardised and delivered effectively online.

#### 4.1.5 Concerns over lecturer and student wellbeing due to ‘invasive’ Ed Tech

Participants shared concerns that some of the ‘hegemonic’ expectations associated with Educational Technology cultures could have detrimental effects upon the

wellbeing of both staff and students in the HEI. At least three participants expressed concern over the disruption of traditional work-life boundaries through the 'always online' connectivity culture around modern technology. Bob was particularly adept with technology, although he viewed its ubiquity sometimes as professional bondage that too readily invades personal and social spheres. He explained that "I don't have the [broadband] internet at home" partly because "it's a form of submission in all areas of your life." He declared that "I feel that pressure though, yes. I occasionally lie in bed on Sunday morning and think, I'd better see if colleagues or students have emailed me, and I'll use my phone [mobile] and then I feel bad about it."

Perhaps blended learning became the scapegoat for those academics unaccustomed to technology domestically and experiencing the cultural pressure for 'always online' connectivity for the first time through their professional Ed Tech. As an aside, Bob provided an insightful objection to the 'unfortunate' branding of the proprietary HEI lecture capture system, Panopto, which he felt to be uncomfortably analogous with Foucault's metaphoric concept of panopticism (i.e. subconscious control from an unknown omnipresent observer): "The name terrifies me, erm, I'm not sure they, either they do understand the origin of it and they want to scare us or..."

The seemingly inevitable permeation of Ed Tech into the HEI was challenged by one participant on behalf of her students. Contradicting Bob and Carl's views above, Kim argued that students *are* indeed requesting Ed Tech, but this was rooted in an increasing dependence upon habitual social isolation. Kim believed that we are "dealing with a generation who are growing up with this" but ironically "*social* [my

emphasis] networking actually isolates you even more". Kim suggested that: "many of them now are experiencing anxiety and panic attacks, having to be out in society [...] preferring not to be in public spaces, doing most of their work independently at home, on technology". Kim recommended face-to-face exposure therapy for students: "If they can make it into that cinema or into that classroom and sit there, that is good". Hugh added that "a lot of them never ever leave their living room sofas. What's going to happen to them when they have to do a job?". Whilst both Kim and Hugh's views harboured a rather negative perception of student predisposition, they were raised as a well-meaning welfare concern that Ed Tech might be catalysing 'unhealthy' student isolationism.

In short, there was a perception amongst some participants that Ed Tech ubiquity in the HEI should be re-thought in some way, with Kim suggesting "I wouldn't encourage more use. I would encourage *balanced* use." It may be the case that 'most people are more likely to see a change positively if they believe that it will not challenge their existing status' (Martin 1999, 136). According to Huws (2014, 17) 'expectations of what "normal" working behaviour should be have also been transformed' and 'the relationship between the private and the public seems to have been turned inside out' (Huws 2014, 13). If this is the case, then 'normal' working boundaries might not exist anyway.

Although ambiguous, since pathologies are interconnected and overlapping, the Habermasian pathology of disintegration (erosion of social bonds) seems to be evident here as ubiquitous technological imperatives permeate the HEI and challenge some traditional methods of teaching and pastoral interaction. This can be

seen in the encroaching erosion of traditional work-life boundaries perceived by participants, perhaps due to cultural practice associated with the ubiquity of technological proliferation. Perhaps more tenuously, erosion of social bonds might also be apparent when academics believe physically absent students to be 'disengaged' when they might instead be fully immersed with the remote affordances of Ed Tech.

#### 4.1.6 Blended Learning findings

In summary, the Blended Learning change era became synonymous with: participant fears around organisational efficiency approaches, the encroaching hegemonic impact of Ed Tech on professional practice, perceived deficiencies in evidence for Ed Tech and a lack of academic consultation. These characteristics led to feelings of suspicion, cynicism, displacement and resistance amongst participants. Such feelings might represent examples of pathologies which, according to Habermas, occur when the systemworld encroaches into the increasingly provincialised lifeworld of participants. Ash called this encroachment the "institutional bloody juggernaut [which] crushes everything in its path".

The main pathology demonstrated by participants during Blended Learning was anomie, as seen in their perceived lack of evidence for using Ed Tech and their concerns about efficiency taking precedence over this academic practice. Alienation was another pathological concern when participants felt displaced by the lack of inclusive consultation. Pathological disintegration was evident when participants felt that their preferred learning and teaching practice was being challenged. Finally,

pathological social instability was seen when the ubiquity of Ed Tech use encroached too much into the personal and social spheres of participants.

At risk of impinging on the discussion chapter, it was during data collection for this round that my insider position as senior lecturer could have influenced some of the 'us vs them' pathologies that emerged from participants. I was looking for critical opinions to reinforce some of my secondary lens, as seen at the top-left of a legacy research poster (Appendix E) conceived when emancipatory narrative research was my original critical intention. The gap between my mindset during data collection and final data analysis was the widest in this round. However, my subsequent career enlightenment helped me to reformulate some of the more controversial data findings into a responsibly balanced and informed discussion, which can be seen in the following chapter.

Regarding the research questions, most of this data is relevant to RQ2 which asks: "How do academics articulate their perceptions of Educational Technology implementation in the post-1992 HEI?" In short, they articulated a range of largely negative opinions about Blended Learning and this is directly relevant to sub-question RQ2b. RQ2c asks 'How do academics position themselves in relation to these experiences'? The data suggests that they exhibited a relatively resistant view of Ed Tech since they were unconvinced of its merits, suspect of the negative effect upon their lifeworld and cynical of its original justification for implementation. As such, most of the pathologies associated with Blended Learning were related to perceptions of Ed Tech as a medium for systemworld imperatives that appeared to

threaten, paradoxically, the regenerative ability of the lifeworld(s) that they happened to *depend* upon.

In short, the potential affordances of blended learning (as pedagogic approach) may have become overshadowed due to what participants perceived to be an ill-conceived change process. RQ2a asks ‘What forms of Ed Tech implementation are available to the HEI?’ and I would suggest that Blended Learning demonstrated formal leadership of change: ‘Formal models focus on the organization as an entity and ignore or underestimate the contribution of individuals’ (Bush 2011, 64). I would suggest that while there are many potential benefits to formal leadership when implementing Ed Tech, such as quicker and simpler centralised decision-making, the pathologies demonstrated during the Blended Learning era suggest that this was not conducive to academically palatable Ed Tech change in the HEI. In many ways, the Blended Learning era might represent a good historical example of managerial purposive rationality to support systemworld imperatives at the expense of lifeworld concerns.

## **4.2 Phase Two: VLE Review (2010-12)**

Whilst initially highly resisted, the homegrown VLE known as GOLF (anonymised pseudonym) evolved to become very popular amongst academics eventually. In 2010, the internal VLE support team expressed concern that GOLF’s dated infrastructure might not be able to accommodate even the most rudimentary developments anticipated on the HEI Ed Tech horizon. In addition, GOLF was used exclusively in the host HEI, whereas collaboration with other HEIs through a shared



proprietary VLE platform might be advantageous. It was rumoured that University Executive responded to this and formed an internal working group and used two external consultants to establish whether GOLF should be replaced and by what.

After a period of consultation, the internal working group concluded that GOLF should be replaced by Moodle and email communication informed staff of the decision. This email announcement led to widespread dissent amongst those academics that had expressed unequivocal support for GOLF during the consultation. Eventually, the decision to adopt Moodle was later repealed, allegedly after the financial repercussions of implementing, accommodating, training, supporting and firewalling the 'free' version of Moodle became apparent. Whilst some academic staff celebrated the victory of retaining GOLF through organised protest, more unrest emerged as rumours spread that financial reasons (not academic appeasement) motivated the host HEI to retain GOLF.

Further unsubstantiated rumours circulated amongst academics that there were internal political motives for adopting Moodle (i.e. a senior leader allegedly had enthusiasm for Moodle and wanted to hasten its implementation). In some ways, this change process might have been an example of political change, wherein 'The outcomes of the complex decision-making process are likely to be determined according to the relative power of the individuals and interest groups involved in the debate' (Bush 2011, 105). However, whilst critical perceptions dominate the data for this era, one of my deficiencies as an insider researcher is that I did not ask participants to reflect upon the reasons for this negativity during our interview. On

reflection, I was probably too close to the original experience and the negativity seemed too obvious to us both.

In the interests of transparency: whilst Eve and Lynne only participated in round one, Eve was able to comment on the VLE Review due to privileged internal early knowledge of it as part of her wider organisational duties. Also, since Lynne's interview was scheduled shortly after the VLE Review consultation was launched, Lynne was able to offer early opinions on it. Therefore, much of the data below was captured by the six participants of round two (Bob, Dee, Fay, Hugh, Kim, Jayne) with some data coming from the three participants of later interviews in round three (Bob, Fay, Kim). All participants are long term senior lecturers apart from Eve and Greg (see Appendix C for biographical details or Table 3 for a summary). As with Blended Learning, the data themes are categorised through the sub-headings below.

#### **4.2.1 Protectionism towards existing technology**

Some participants expressed protectionist attitudes towards established Ed Tech cultures, partly rooted in negative perceptions of what the implementation of new technology might entail. Participants largely equated new technology with an increase in workload, change to existing teaching practice and even as an extension of new managerialism.

There was considerable resistance to the rationale for VLE change, leaving Eve to ask: "if it's not broke why fix it?". Whilst GOLF was initially resisted, it evolved over time to become a highly prized VLE: "GOLF is brilliant" (Hugh), "GOLF is a very, very

useful platform” (Bob) and even “they did a good job there” (Kim). One participant was particularly protective over GOLF: “I’m here to climb on the barricades if they do anything about GOLF and also it’s so silly not to use it as a third-stream income opportunity” (Ida). Lynne articulated dislike for large scale and seemingly unnecessary change: “I don’t like when there’s big change like erm, like this GOLF to this Moodle and things like that, and erm, and I don’t like doing things that I feel are a waste of time”. Kim agreed that “it’s a waste of my bloody time” and felt that there should be a rationale for VLE change: “but *why* are we doing this? This is what I want to know”. These views suggest that participants would have appreciated a robust rationale for change, especially given the likely impact upon their workload.

There were several potential reasons for the unwillingness to change from participants. Some unwillingness was due to aversion to change *per se*: “in some, some cases there’s, there is a fear of changing something” (Eve). In relation to Kim and Eve’s views above, Spector (2011, 28) suggests that ‘Some will resist integrating new technologies as doing so may seem to threaten practices that have become comfortable routines’, but it does not necessarily follow that any routines should be automatically preserved. Martin (1999, 129) concurs that ‘When we are told to change our ways of working, we are likely to feel threatened’. Hence the protectionism for GOLF appeared to be partly rooted in some intransigence rather than a preference for what GOLF can do.

The perceived near procurement of Moodle raised suspicions amongst participants that there were other influential concerns beyond financial savings involved in the change process. In an isolated example, Dee believed that University Executive

wanted to reinvigorate academic staff out of their 'comfort zone' in relation to their established academic practice: "I can do most things I want to do in GOLF. Erm, so once you get comfortable, they start thinking, oh we can't have that, let's change it to Moodle, you know." Dee could provide no evidence for her belief, but it remains to this day an enduring academic perception shared informally and anecdotally with me several times. Perhaps such beliefs, once intersubjectively agreed and assimilated by members of a group, were the reason why certain rumours circulated and suspicions toward management became commonplace during times of systemworld led change

Participant aversion towards VLE change might be explained by the Habermasian pathology of social instability (destabilisation and breakdown in social order) that was experienced by some participants yet only *anticipated* by others. It is important to remember that Moodle was never implemented in the host HEI so much of this pathology is based upon negative expectations of change and unverified popular myth. This phase of change also demonstrated that perceptions of a VLE procurement seen as dissonant with academic values can prematurely undermine innocuous opportunities that a new VLE might genuinely provide.

#### 4.2.2 Lack of confidence in internal Ed Tech leadership

Four of the twelve participants articulated a lack of confidence in the expertise, integrity and myopia of internal leadership for Educational Technology. Bob believed that we "need an expert to say, this is the industry standard" suggesting that the role of human expertise is important to procuring Ed Tech. However, he did not think

such expertise was obvious internally: “I don’t always get the sense that that level of sophistication is there in the University’s decision-making process, especially around technology use”. Whilst Hugh’s following assertion about the role of external consultants cannot be independently verified, as is the case with any perception or rumour, it was another commonplace and debilitating belief circulating at the time of the VLE Review:

“they [senior management] scrapped two consultancy reports, OK? One that apparently gave them the answer they wanted and the other that apparently didn’t. The first one they had to scrap for politics. The second one they scrapped because they didn’t like the answer.” (Hugh).

In relation to leadership, Bob suggested that “I’m not sure that we [management] are willing to invest in either the technologies or the expertise to entertain everybody’s needs.” Here Bob espoused a belief that University Executive could resource more pedagogically bespoke Ed Tech but perhaps lack the propensity to: “Erm, well I’ve seen the accounts and we’ve got an enormous surplus and we’ve just built twenty-five million pounds worth of buildings out of the savings. So, we have got the money, it’s where we want to spend it” (Bob). It might be that the acquisition of real estate in a prime location could be one way to ‘stay profitable’ (Hussey and Smith 2010, 107) as such an asset is likely to rise in value compared to Ed Tech resources and related infrastructure that are either intangible or will too readily depreciate in value.

Dee was more vehement about what she felt was an intentionally obstructive approach by certain internal Ed Tech leaders, suggesting that “sometimes people with expert knowledge in this area actually set up barriers” to maintain their reputation and status. She suggested that “as soon as your, the group you’re trying to convince catch up with you, you have to move on to something else”. Bush (2011,

140) concurs that in political leadership: 'Individuals, interest groups and coalitions have their own purposes' and conflict is the inevitable outcome of this. Dee went further and suggested that to retain personal prestige some Ed Tech leaders resort to recycling obsolete and rebranded initiatives. She believed such practice to be both institutionally endemic *and* routinely unacknowledged: "it's the old Emperor's New Clothes. And people who want to make their mark don a set of new clothes. They pretend that nobody ever had such fine clothes before. And the denial of history, *my God*." Hugh mockingly implied that long-serving academics whom have already witnessed many 'new' initiatives have a duty to inform Ed Tech leaders of their deficiencies:

"Yes, but yes, but the emperor, the emperor is stark naked and instead of telling them that, they're asking him, you know, 'Where does he go to buy the full line?' Instead of offering the poor bastard sunscreen." (Hugh)

With reference to the fable of the Emperor's New Clothes, Hugh linked the emperor to the senior Ed Tech leader, the silent circle of sycophants around him being his immediate colleagues whilst those who are not intent on seeking political favours are the likes of staff such as himself and Dee. Dee and Hugh's critical opinions imply that academic input, however adversarial, might have helped to *improve* the expertise of Ed Tech leadership by imparting the knowledge of end users.

Whilst this section has overlaps with other pathologies, the Habermasian pathology of anomie (decrease in shared meanings and mutual understanding) seems to be the most applicable since inter-personal trust arguably requires mutual understanding between people. More specifically, academics expected Ed Tech experts to be knowledgeable about their role and ethical in their practice. This lack of

trust appeared to lead to an 'us vs them' dichotomy for Ed Tech implementation: a characteristic of political approaches to change where 'there is too much emphasis on conflict' (Bush 2011, 121) as observed between Ed Tech leadership and academics during the VLE Review.

#### 4.2.3 Distaste towards neoliberalism rooted procurement

Participants were dismayed that VLE procurement appeared to be motivated by financial imperatives rather than being responsive to academic practice. Four of the twelve participants felt that the VLE Review process was primarily driven by incongruent neoliberal intentions: "the reason we were thinking about Moodle is because it was *cheap*" (Kim). Whilst seeking best value for a new software package is quite a reasonable aim, Kim believed that "you can use Moodle free and it's the basics" but warned that any use beyond basic operations incurs a cost. Completely unconnected to Kim's view and in reference to previous change processes, Dee alleged that "the history of universities getting conned on IT systems, erm, is quite long" and expressed a wider concern that "the commercial vultures are circling the University" thereby labelling market forces as questionable.

Balancing financial concerns with academic practice (akin to balancing systemworld and lifeworld) is not an easy task within HEIs that feature increasingly diminishing budgets and resources. Barnett (2003) believes that the HEI is in 'considerable difficulty' because it is beset by the many ideologies of competition, entrepreneurship, quality, managerialism and research. Maybe this is why Burawoy (2011, 29) suggests that 'the university came to look more and more like a

corporation’ and why Selwyn (2007, 86) argues that ‘private interests exert a profound shaping influence on education technology’ within the HEI. All organisations have ideologies and there is no reason why the HEI should be immune from this but, as seen in the literature review, the encroachment of neoliberalism into the HEI seems to be a particularly unpopular development according to the academic community.

As such, the Ed Tech procurement and implementation process might have benefitted from concurrently accommodating the demands of both systemworld and lifeworld, a method for doing so being outlined in the discussion chapter. In this case, the Habermasian pathology of anomie (decrease in shared meanings and mutual understanding) seems to be evident within a procurement process that was perceived to value fiscal concerns above learning and teaching matters. Reflecting upon best practice in technological change, Shirley (2011, 190) calls this ‘yet another push–pull pendulum swing between traditional forms of teaching and learning and new possibilities that are sometimes pushed with only a thinly-veiled profit motive in mind’. During the VLE Review, some of the participants appear to have targeted their perceptions towards this ‘thinly-veiled profit motive’ that was all too obvious to them.

#### 4.2.4 VLE Review Findings

In summary, the VLE Review process became associated with negativity towards seemingly unnecessary change, aversion towards economic imperatives, fear of hidden agendas and lack of confidence in the Ed Tech leadership deemed responsible for the VLE Review. This resulted in expressions of aversion, distaste,



despondency and disengagement from the participants. The main pathology that emerged was disintegration, based on the negativity towards Ed Tech leadership and rejection of neoliberal agendas. In short, participants felt that they had perhaps lost 'strength' due to hegemonic systemworld approaches to procurement that might have disempowered them. Another important pathology was social instability instigated by what participants felt was unnecessary change, especially since the decision to adopt Moodle seemed erratic to them (i.e. most academics and participants had expressed support for GOLF). Finally, alienation was another potential pathology with participants feeling somewhat side-lined by hegemonic neo-liberal encroachment they did not agree with.

Again, at risk of veering towards the discussion chapter, my position as Principal Lecturer during this round of data collection certainly nuanced my perspective but also positioned me as a middle manager that might affect participant disclosure during interviews to some extent. My new, more balanced perspective arose from working increasingly with systemworld mechanisms and stratagem, but I also retained an operational and empathetic grounding with the lifeworld. I retained a professional and personal distance from top-down managerialism and remained sceptical of certain organisational incarnations of the systemworld. As such, I could still convincingly distance myself from, and be critical towards, senior management when required.

As already addressed, much of this material is generally related to RQ2: 'How do academics articulate their perceptions of Educational Technology implementation in the post-1992 HEI?' Of importance to the VLE Review is RQ2c which asks, 'How do

academics position themselves in relation to these experiences?'. I would suggest that the participants positioned themselves as protective, resistant, despondent and disengaged due to the way in which they were provincialised during the VLE Review. RQ2a asks 'What forms of Ed Tech implementation are available to the HEI?' and my interpretation suggests that this was an example of political leadership in relation to Ed Tech change whereby 'Political models stress the influence of interest groups in decision-making and give little attention to the institutional level' (Bush 2011, 120). Political leadership differs from formal leadership in that 'Conflict is viewed as a natural phenomenon and power accrues to dominant coalitions rather than being the preserve of formal leaders' (Bush 2011, 99).

Whilst it may be normal for conflict to emerge from participant views, it is the appropriation of this dialectic towards intersubjective consensus that is more germane to this study, as developed in the discussion chapter. The VLE Review era seemed to demonstrate an example of systemworld purposive rationality that initially, at least, appeared to resemble communicatively rational consultation.

### ***4.3 Phase Three: Digital Campus (2015 onwards)***

University Executive decided that the Digital Campus project would be a transformative approach to every aspect of HEI digital improvement (e.g. 24/7 data access, user friendly portals, digital library engagement, cloud applications, administrative support). Whilst the process began quite amorphously in 2015 several foundational projects were launched that were intended to help steer and inform the direction of Digital Campus (i.e. reviewing digital infrastructure, democratisation of

data, software accessibility and exploring a new VLE). A dedicated Digital Campus information source described it as a synergy between people, processes, systems and IT that transcends traditional university boundaries and maintains academic vision (paraphrased for anonymity) as a portal for stakeholder digital requirements. As such, Digital Campus had an ambitious vision that aimed to build upon *and* supersede the two previous Ed Tech change phases.

From the outset Digital Campus stakeholder consultation appeared more meticulous than during the previous two change phases. Ed Tech leaders consulted regularly with several stakeholders (e.g. academic, student representation, senior leadership) to help steer the project towards a clearer direction. Crucially, as evident in the data, the purpose and scope of the Digital Campus change process did not appear to be a *priori* agreed during this third phase of change. Also, the Digital Campus approach seemed to serendipitously address some of the pathologies associated with the previous two change phases. The whole change process was award-winning (not detailed for anonymity) and recognised on a global scale for representing good practice in Ed Tech change. The Digital Campus initiative appeared to appropriate at least some of the academically palatable features of collegial change, as covered in the literature review (section 2.1.8).

It is important to declare that my final round of data was collected at a time when Digital Campus had been recently introduced to academics, so there were relatively few tangible outcomes of the change process available to my round three participants (Bob, Fay and Kim) to reflect upon when interviewed. Again, for transparency, the views of Dee and Jayne (round one and two participants) are

included because they had early insight into Digital Campus as part of their additional duties at the host HEI (see Table 3 and Appendix C). Each sub-heading below represents an aggregated and distilled theme to simplify the presentation of data.

#### 4.3.1 Apprehension due to Ed Tech change legacy

The history of Educational Technology change in this HEI (i.e. Phase one and two) appeared to have significant repercussions for the way in which the fledgling Digital Campus was perceived by participants. All three participants appeared apprehensive about Digital Campus for different, historically embedded reasons. Kim disparagingly described the initial concept of Digital Campus as “err, kind of like bastard baby, baby of distance learning and the bastard baby of [named software], d’you know?” but this view is based upon her negative view of two historical manifestations of Ed Tech rather than direct experience of Digital Campus. Kim also argued that “if they approached it, in terms of digital learning, then I think we have the potential to begin to develop an interesting innovative exciting strategy”.

Kim’s entrenched opposition appeared to be rooted in her experience of legacy Ed Tech change rather than her actual experience of Digital Campus in practice. Kim remained unconvinced that the Digital Campus consultation process would be integrity driven: “it will be interesting to see whether or not the loads and loads of staff consultation will be listened to, in the same way that staff consultation was listened to for the move to Moodle, and, do you know, we were *completely* ignored”. Whilst there is no irrefutable evidence of Kim’s claim, there was an enduring shared

belief amongst academics that ‘contrived collegiality’ (Hargreaves 1994, 186) might have been prevalent at that time.

Whilst there is no specific pathology to allude to in this section the underlying assumption here is that integrity and collegiality were important for agreeable Ed Tech change. This is related to the concept of values, as the corollary of pathologies, explored in the following discussion chapter. Whilst the VLE Review might have consulted in a way that Blended Learning had not, it may not have been as genuine as Kim expected. The apprehension demonstrated here indicated that an unfavourable legacy experience of Ed Tech change can affect academic perceptions of subsequent and unconnected change initiatives.

#### 4.3.2 Aversion towards the unknown

There was a perception that Digital Campus was conceptually esoteric and that academics were involved only since internal Ed Tech leadership lacked the expertise to envisage a ‘digital’ campus. Participants expressed aversion towards the amorphous nature of the fledgling Digital Campus which, paradoxically, might have been due to the increasingly consultative approach it adopted. This consultative approach might have ameliorated the difficulties discussed in ‘Displacement due to lack of consultation’ (section 4.1.3), yet three participants were suspicious of this opportunity for early academic involvement. Bob, for example, explained that Digital Campus is an “empty vessel at the moment” and Fay agreed that “it’s a nice sounding phrase but, you know, what does it mean?” Jayne expressed similar concerns in that “it’s all kind of very vague and nebulous at the moment”. Dee added

management critique by suggesting that “it’s a bit of er impression management” and argues that “it’s a brand, isn’t it? And, you know, I don’t mind calling things by some attractive name, as long as it has a meaning.” Such views consider Digital Campus to be a vacuous concept, attracting more management critique from Bob: “I think somebody dreamed up the phrase, ‘Digital Campus’ and then we’ve got to decide what it means”.

Some of the critique of management might have been premature given the period during which data was gathered. Jayne suggested that the unexpected willingness for Ed Tech leaders to consult with academics early was rooted in the academic dissent following the VLE Review: “from what I’ve heard, that [external] consultant did actually listen, and they looked at the whole thing about the VLE review and they looked at the data from that and they listened to staff.” If true, then the new approach taken by Digital Campus might have represented a sincere attempt to improve the change process for academics. Shaw (2002, 162) advocates the use of ‘open-ended, exploratory conversation amongst attentive, engaged humans’ to improve organisational discussion, alluding to a communicatively rational approach to consultation.

A recurring idea with the data is that participants wanted pedagogy to drive the acquisition of technology, yet they didn’t readily declare their pedagogic rationale during interviews. Laurillard (2008, 1) calls for an ‘education-driven pedagogy for technology rather than a technology-driven way to upgrade existing teaching approaches’ and Savin-Baden (2008, 83) argues that academics ‘believe that technology disables rather than enables the pedagogy’ leading to control rather than

creativity. Paradoxically, when given the early opportunity to inform an ‘education-driven pedagogy for technology’, some participants found this unsettling, perhaps because such an inclusive approach was relatively unknown to them. This *might* have conformed to the Habermasian pathology of social instability (destabilisation and breakdown in social order) because the convention was for little or no opportunity for participants to inform change previously. This is unfortunate since, in many ways, the early consultation of Digital Campus provided much of what participants felt was lacking from earlier change phases.

#### 4.3.3 Expressing hope and optimism

The fledgling nature of Digital Campus invited unexpectedly positive academic perceptions of meaningful inclusion at grass roots level. Despite the legacy-informed apprehension and aversion towards the unknown, there were also many semi-positive views about Digital Campus, such as when Jayne declared she was “feeling cautiously optimistic” about it and hoped that Digital Campus would provide “a more joined up experience. Because at the moment, all that information’s held in separate bits of the University”. Jayne welcomed the potential for Digital Campus to be a user-friendly staff and student portal, which acknowledges important functions beyond learning and teaching.

Some participants felt more involved in this change process and others were hopeful that there might be a more consultative and open approach to change being demonstrated. Even some of the more outspoken and critical participants of previous data rounds appeared to be placated somewhat by the change approach of Digital

Campus. Two of the three main participants in round three felt that they were being listened to more genuinely than previously. Fay, for example, accepted that “Yes, yes, no, they are listening, they are listening, it’s true”. Bob concurred that “there are signs of movement” with the leadership of Digital Campus and that “it’s clearly being approached in a different way from other large projects”. Bob, as a self-confessed career cynic, expressed surprise that he was asked to be involved in the early consultation phase of Digital Campus: “Getting onto the academic XXXXXX group for the Digital Campus has been, I was pleased to be invited”. I believe that, given his very outspoken reputation, Bob’s invitation to the group could have been deliberate, strategic and an overt testament to the more openly communicative approach of Digital Campus. However, his invitation could also have been covertly Machiavellian and there is no way of verifying either intention.

There are a few possibilities as to why Bob and Fay may have felt placated during the consultation phase of Digital Campus. In their consideration of technology as a process *and* a value-laden system, Amiel & Reeves (2008, 35) suggest that ‘Practitioners are rarely part of the research design process, and are meant to reap the benefits of research when it is complete’. As such, being able to make a meaningful contribution to something that they are expected to use and implement might help practitioners feel more empowered and involved. The suggestion here is that the Digital Campus change process might have offered participants more obvious mechanics for input. Obviously, there are no identifiable pathologies within a positive theme of hope and optimism. Instead, the ideas covered here are much more relatable to the concept of how positive values can nullify pathologies, to be



addressed in the following discussion chapter (sections 5.02 and 5.03) in more detail.

Another slightly more tenuous reason for more favourable perceptions of Digital Campus could be the changing organisation role of participants. Bob expressed uninhibited critique during early data collection that was later revised during subsequent interviews as his organisational position changed. He began round one by suggesting that “our blended learning strategy is a mix between quite sinister and entirely fraudulent” and our engagement with technology “can’t provide the richness and personalised attention that every student deserves.” However, by the third round of data collection he changed to “a more nuanced view” whereby a wider role he had recently adopted meant that “seeing it from a management perspective, at least, has given me a perspective that wasn’t available to me before. Erm, it’s made me think about things more carefully.” What this participant reflection implies is that situated perceptions can be later revised, so I believe that any thesis research recommendations need to transcend the local and historically contextual perceptions, which is precisely what the discussion chapter attempts to do.

#### **4.3.4 Digital Campus findings**

To summarise, according to participants (specifically Bob, Fay and Kim), the Digital Campus change process was primarily associated with legacy negativity around previous change processes, fear of the unknown and concerns about technological rationality. There was also a sense of hope and optimism that was not evident in the previous two phases of change, with some participants even distancing themselves

from critical comments they made in previous interview rounds. However, there is limited scope in data to draw robust conclusions from since research interviews were conducted at a time when the change phase was in its infancy. This is unfortunate and could not have been anticipated during the planning, proposal and completion schedule of this thesis (as covered in section 3.10 of research design). With perceptions dominated by legacy experiences, the participants alluded to most of the pathologies discussed in previous sections, especially anomie, alienation and social instability.

By now, as Associate Dean, I was not an insider any more, and I believe that the insight this role provided meant I was able to perform the data analysis in a more balanced way. Crucially, I did not appreciate the ramifications of senior leadership until I undertook the Associate Dean role, so in this round of data collection the dialectic between myself and participants was sometimes more pronounced *during* data collection rather than part of subsequent data analysis. For example, I delicately reminded Fay that her Ed Tech career was probably enhanced by the managerial mandates for increased Ed Tech use and she accepted this, albeit reluctantly. As covered in the research design, I was now involved in different leadership concerns beyond academic matters and this provided a new sense of perspective for me. I maintain to this day that the academic voice may be too readily overlooked in the HEI, but my reasons for this belief are now multifarious and complicated.

So, what can be concluded from the data available? In relation to RQ2 'How do academics articulate their perceptions of Educational Technology in the post-1992 HEI', I would suggest that participants articulated perceptions attuned to their

expectations of incongruent change management. However, by contrast, I propose that the early stages of Digital Campus demonstrated a relatively enlightened approach to leadership which may have served to ameliorate potential pathologies to some extent, given the opportunity. At risk of pushing interpretation, there is evidence that the broadly collegial change process adopted for Digital Campus was more agreeable to participants. The relatively positive comments about consultation during change (RQ2a) indicated that there might be a discernible link between forms of implementation, academic experience and how participants then positioned themselves consequently.

The more accommodating consultation by Ed Tech leadership during Digital Campus seemed to take grassroots academic input seriously from the outset, which can be broadly interpreted as a manifestation of collegial leadership in relation to Ed Tech change. According to Bush (2011, 74) 'Collegial models assume that professionals also have a right to share in the wider decision-making process' and 'shared decisions are likely to be better informed and are also much more likely to be implemented effectively' (ibid). This idea is fundamental to the discussion chapter.

#### 4.4 Conclusion of findings

In conclusion, there are several important findings related to the Ed Tech change phases of Blended Learning, VLE Review and Digital Campus. As a reminder, RQ2 asks 'How do academics articulate their perceptions of Educational Technology implementation in the post-1992 HEI?'. The participant data around the Blended Learning and VLE Review change phases indicated negative perceptions related to

suspicion, resistance, displacement and lack of confidence in Ed Tech leadership involved in implementation. These can be subsumed into four main pathologies (anomie, alienation, disintegration and social instability) associated with the colonisation of the lifeworld by the systemworld. Blended Learning and the VLE Review could be examples of formal and political change leadership respectively, the approaches of which overlap with some of the instrumental rationality of the systemworld.

Whilst many of the perceptions and pathologies identified in phase one and two are unsurprising, this negative legacy led to participant mistrust towards the fledgling Digital Campus era. Interestingly, the Digital Campus era was the only change process that featured *positive* participant perceptions, possibly due to the more palatable collegial approach to leading on change. As suggested in the introduction, there appeared to be some connection between the organisational change approach, participant perceptions and my own fluctuating organisational role. The transformation from largely pathological towards more positive perceptions by round three interviews hints at a seemingly enlightened approach to organisational change by the Ed Tech leaders of Digital Campus.

I would argue that the collegial approach of Digital Campus was instrumental in preventing pathologies by removing some of the underlying reasons for their emergence (e.g. early and meaningful academic consultation prevented the pathology of alienation). These ideas are explored further in relation to values, within sections 5.02 and 5.03 of the following discussion chapter. In relation to this, if we consider communicative rationality as the process by which different validity claims

can be brought to a satisfactory resolution, then some of the Digital Campus change process *might* represent an early example of this intersubjective agreement in action.

# Chapter Five: Discussion

## 5.01 Introduction

The purpose of this thesis has been to explore academic perceptions of Educational Technology in the HEI with a view to improving future practice of Ed Tech implementation. The literature review explored how the role of Ed Tech may have developed in the post-1992 HEI (RQ1) because of technological determinism catalysed by external forces on the HEI, student expectations, financial constraints and a pervasive Ed Tech advocacy. An alternative approach to considering the implementation of Ed Tech using a Habermasian conceptual framework was then explored. In relation to RQ2, participants articulated pathological perceptions of Ed Tech due to historically negative experiences (i.e. Blended Learning and VLE Review) which somewhat prejudiced their perceptions of the subsequent Digital Campus era. However, the unanticipated positive perceptions of Digital Campus implied that there might be something more agreeable about the management of that change process.

As such, the purpose of this discussion chapter is to address RQ3: 'How might academic perceptions be used to influence implementation of HEI Educational Technology?'. I will attempt to move from theoretical conjecture towards pragmatic suggestions for improving Ed Tech implementation in the HEI. I will discuss how the pathologies identified in the findings can be inverted to extrapolate the underlying values they might be linked to. I will then consider the operational importance of these values for ongoing Ed Tech change in the HEI. I then explore how these

specific values might be used to inform a HEI sphere, or technology circle, as a mechanism for facilitating *ongoing* stakeholder intersubjectivity by pragmatising communicative rationality in the HEI. Discussing the recommendations for practice here (section 5.09) may be unorthodox for a discussion chapter but it allows the argument to flow more lucidly as a consequence. Perhaps also unorthodox for a discussion chapter is additional participant data to support the argument, applied sparingly and judiciously. The chapter concludes by considering the overall contribution to knowledge and explores the limitations of my research. Whilst the literature review attempted to focus upon Habermas as primary source, this section increasingly makes use of important secondary sources that have attempted to dialectically discuss, apply or update Habermas within their own context.

## 5.02 The importance of values

In this section I address the importance of values for change in the HEI and explore the importance to academics, as introduced in the literature review (section 2.2.6). One participant, Fay, suggested that academic resistance to Ed Tech is based on undeclared academic values: “There is sometimes a perception that it’s a sort of dumbing down or something or, I don’t know. It’s not what core values of academic, err, research or teaching and learning are about.” Discussing the procurement of new Ed Tech, Anderson (2003, 18) argues that academics ‘bring to the educational context their own set of values and beliefs about the purpose of education and rights to it’. In addition, McEwan (2001, 45) describes values as ‘the principles or standards that people use, individually or collectively, to make judgements about what is important or valuable in their lives’. However, whilst these values might be important

to academics, they are not necessarily readily articulated (or readily *articulable*) which is why section 3.11 of the research design featured analytical tools to unearth the underlying meaning of interview data.

As seen in the findings, participants expressed lifeworld pathologies more readily than values, especially in relation to their views on managerialism and technology (a.k.a. techgerialism, section 2.2.6). Bush (2011, 6) describes managerialism as a 'focus on management processes at the expense of educational purposes and values'. Similarly, Lynch (2014, 2) suggests that managerialism 'suppresses other organisational values so that they become incidental to the running of public bodies'. These ideas allude to the possibility of some 'educational' and 'organisational' values that are perceived as important to the lifeworld but are diminished by the systemworld. According to Habermas (1974, 261) 'efficiency and economy are justified as if they were values' yet Newman & Clarke (1994, 29) claimed that 'managerialism possesses no super-ordinate goals or values of its own'. If 'the values of the marketplace and the values of the traditional academic institution, are brought into conflict by the effects of technology' (Beetham & Sharpe 2013, 6), then technology might also be seen as a catalysing medium for systemworld concerns that are deemed incongruent with academic values.

### 5.03 Educational Technology values

I suggest here that there is a broadly inverse relationship between the existence of pathologies and the existence of values whereby the ascendancy of one could influence the diminishing of the other. With reference to Habermas's critical view of



the systemworld, Fleming (2008, 8) suggests that it would benefit from assimilating more of the empathetic values of the lifeworld: 'We cannot ignore or destroy the system. It has functions. But it is possible to insert lifeworld values, caring behaviours, ethical concerns and principles into the system and so resist and reverse colonisation'. I suggest that the Ed Tech pathologies identified in the findings (i.e. anomie, social instability, alienation, disintegration) might have corollary and remedial Ed Tech values (see Table 4, below) that are important to Ed Tech change in the HEI. These values are extrapolated next.

I suggest that the conceptual inversion of each pathology could identify corresponding values that are expressed in the data. Taking each of these Ed Tech pathologies in turn, if the pathology of anomie is the decrease in shared meanings and mutual understanding then I would suggest conceptually inverting this to the remedial value of 'enculturation' to encourage shared meanings and mutual understanding. If the pathology of social instability is the destabilisation and breakdown in social order, then I introduce the value of 'stabilisation' as the renegotiation of social order. If the pathology of alienation is an increase in people's feelings of helplessness and lack of belonging, then I introduce the value of 'solidarity' as the empowerment of people to improve their sense of belonging. If the pathology of disintegration is the erosion of social bonds, then I introduce the value of 'integration' as the rebuilding of social bonds. Therefore, the specific values of enculturation, stabilisation, solidarity and integration might be the remedial corollaries of the Ed Tech pathologies refined in the findings.

Table 4 (below) represents a distillation of the main pathologies (column 1) based on negative data themes (column 2) followed by positive suggestions for addressing the negative data (column 3) followed by their corresponding values (column 4). The pathologies in column 1 are organised in priority order of the most common Ed Tech pathologies. Column 2 shows the specific thematic categories (i.e. sub-headings in findings chapter) that informed each of the pathologies. Column 3 provides some suggestions for remedial action to address the pathological findings of column 2. Finally, column 4 shows the corresponding values that might serve to remedially reduce the original pathologies of column 1. Most importantly, it is the pathology inversion from column 1 into the values of column 4 that is foundational to the originality and wider impact of this research.

**Table 4. Educational Technology pathologies and their corollary values**

(Key - BL: Blended Learning, VLE: VLE Review, DC: Digital Campus)

Pathological Zone		Remedial Zone	
1.Pathology	2. Finding	3. Suggestions for remedial intervention	4. Value
<b>Anomie</b>  (decrease in shared meanings and mutual understanding)	(BL1) Suspicion arising from lack of evidence.	(BL1) Provide evidence or other justification with fora to explore and challenge rationale.	<b>Enculturation</b>  (fostering shared meanings and mutual understanding)
	(BL2) Cynicism fuelled by the ulterior motive of efficiency over academic practice.	(BL2) Declare intentions and importance of HEI efficiency. Explore how academic practice and experience can inform change.	
	(BL4) Resistance due to Ed Tech challenge to academic practice.	(BL4) Explore ways in which academic practice might be enhanced by Ed Tech.	
	(VLE2) Lack of confidence in Ed Tech leadership.	(VLE2) Facilitate open communication. Use hybrid leadership with mandated academic input to inform change.	
	(VLE3) Distaste towards neoliberal procurement.	(VLE3) Explain why this is necessary upfront with decreasing HEI resources. Explore alternatives.	
<b>Social Instability</b>  (destabilisation and breakdown in social order)	(VLE1) Protectionism towards existing tech.	(VLE1) Determine what is being 'protected' and why. Extol benefits of change and potential of tech.	<b>Stabilisation</b>  (renegotiation of social order)
	(DC2) Aversion towards the unknown.	(DC2) Demystify the unknown via open communication, induction and training support for new initiatives.	
<b>Alienation</b>  (increase in people's feelings of helplessness and lack of belonging)	(BL3) Displacement due to lack of consultation.	(BL3) Offer genuine two-way consultation to embrace established academic practice and experience of those less familiar with technology. Demonstrate how academic input is used to inform change.	<b>Solidarity</b>  (empowerment of all people to improve their sense of belonging)
<b>Disintegration</b>  (erosion of social bonds)	(BL5) Concerns over lecturer and student wellbeing due to 'invasive' Ed Tech.	(BL5) Introduce well-being initiatives (e.g. no email day) to avoid over-reliance upon distancing devices.	<b>Integration</b>  (rebuilding of social bonds)

Although not extensive, there was some evidence from three participants to support a values-based approach to Ed Tech change. For example, Jayne believed Ed Tech leaders should “sit down with academics and do developmental stuff and explore pedagogy” (enculturation, or mutual understanding, of different pedagogic approaches). Fay believed that “you need to involve people as early as possible, vocally as possible, and meaningfully, that changes can be made, that it’s not just the implementation of the decision-making process” (solidarity of stakeholders so they are empowered to contribute to the nature of change). Bob wanted “a conversation with experts, pedagogic, subject and technological” simply “because they’ve been proven” (integration through building more constructive social bonds). Finally, despite Kim’s enthusiasm for Ed Tech she “would encourage balanced use” and believed that “education will have a backlash against technology” at some point (possibly seeking the stabilisation potential of using less tech).

#### 5.04 A public sphere

Section 2.2.7 of the literature review suggests a Habermasian approach for decolonising the lifeworld and I believe that values, column 4 of Table 4, might be crucial to inform a discursive public sphere within which this can be achieved in the HEI. With the rapid pace of change associated with Ed Tech innovation, any research contribution based on historical data is likely to become obsolete very quickly. More useful, in my view, is to consider interventions that might also accommodate currently unpredictable future possibilities too, especially if ‘The question of where the line should be drawn between system and lifeworld [...] is not a predetermined, theoretical question but a fluid, empirical one’ (Edwards 2017, 30).

I believe that the public sphere is a discursive space to accommodate intersubjective stakeholder consensus for Ed Tech change. Discussing the importance of Habermas in an educational context, Fleming (2010, 117) speaks of the need for informal space 'created outside class halls for those conversations and discussions that are spontaneous, informal, and that contribute to the social glue of interaction' that are currently spaces set up to support the economy (e.g. retail outlets, food halls). Seen this way, the opportunity to enrich the communicative lifeworld might be compromised due to physical systemworld colonisation of informal discursive spaces. Murphy (2017, 10) elaborates upon spaces 'where people meet in the realm of proximity, where local and "petite" stories countering the hegemony are created and told'. Savin-Baden (2008, 60) identifies 'a space where interrogation within and across disciplines can occur, and perhaps more importantly a space where the fabric of higher education can be deconstructed'. So, it seems that spaces for critical discourse within (and about) the HEI could be important, but such spaces might vary in their formality.

A useful contribution to practice might therefore be to deliberately facilitate discursive spaces wherein people are 'able to deal with conflicting situations and perform the proper [communicatively rational] exchange of arguments' (Forchtner 2010, 11). In such spaces we 'arrive at decisions motivated solely by the unforced force of the better argument' (Fleming 2010, 119) or 'unforced volition' (Brookfield 2010, 129). These ideas imply that there are rules for discourse that might lead to consensual outcomes if they are somehow free of coercion. This is what Habermas calls 'undistorted communication' and others label 'genuine conversation' (Baker and

Warren 2015) within a discursive space that 'must be relatively free of distortions' (Cherem 2016, 31). Within this public sphere, Habermas (1998, 292) stipulated:

i) that nobody who could make a relevant contribution may be excluded; ii) that all participants are granted an equal opportunity to make contributions; iii) that the participants must mean what they say; iv) that communication must be freed from external and internal coercion so that the "yes" or "no" stances that participants adopt on criticizable [*sic*] validity claims are motivated solely by the rational force of the better reasons.

I would argue that these stipulations need to be achieved in some measure if a Habermasian public sphere is to be realised, as has been suggested by those theorists that attempt to apply Habermas in their respective academic fields. For example, regarding egalitarian participation, Holub (1991, 3) suggested that 'Potentially everyone has access to it; no one enters into discourse in the public sphere with an advantage over another'. Inglis & Thorpe (2012, 77) agree that 'Everyone is treated the same, and all treat each other as equals, regardless of who they are outside the ideal speech situation'. Cherem (2016, 31) believes the public sphere provides a 'context of discovery' since communicative rationality might yield unpredictable outcomes to enrich the discourse. Such egalitarian spaces, however laudable, are not straightforward to actualise.

Even if facilitated, these spaces might not give rise to the intersubjective consensus associated with communicative rationality. Fleming (2008, 13) believes that the imperative for 'openness to alternative points of view; empathy with and concern for the thoughts and feelings of others; the ability to weigh evidence and assess arguments' are not assured as part of the exchange. Even if such ideals are possible, this does not mean that stakeholders will necessarily engage. Bob

suggested that “If you don’t consult people they’ll moan. If you do consult, they’ll say, I’m too busy”. Jayne added that “I think we do actually have a lot of ways of having a voice, some people don’t use their voice...and then I’m not sure who listens to all of the bits that we express our voice to”. In support of this, Chambers (1996, 198) argued that regardless of opportunity, some ‘People have little interest in the decisions that affect them and are willing to allow others to debate the issues and find solutions’. So, there is potential for this space to be inclusive and accommodating, but perhaps not always a *willingness* from academics to readily participate.

According to critical perspectives around Habermas, one problem with attempting communicative rationality is that it is an essentially idealistic approach that is tasked with reconciling too many disparate and hierarchal stakeholder views in organisations. Martin (1999, 60) believed that ‘the view of many staff at the chalkface is so different to the view of others further up the hierarchy’. Also, Crespi (1987) argued that communicative rationality itself has been criticised as being utopian, idealistic and abstract. Holub (1991, 15) believed communicative rationality is not readily practiced in real life perhaps because it ‘envisages as its never-realizable *telos* a state in which unconstrained, perfectly free communication occurs’. Chambers (1996, 206) touched upon the inevitable impact of power in discourse by suggesting that ‘Communicating “as if” we we’re all equal, when in fact we are not, simply will not be enough to immunize discourse from the distorting effects of economic inequality’. These views suggest that facilitating communicative rationality is a challenge.

One challenge is that stakeholder organisational power might result in distorted communication. Critiquing Habermas, Kennedy (2017, 67) suggests that communication in the public sphere is 'always contaminated, always constitutive of a struggle between attempts to communicate across fields and structures to achieve compromises, which are simultaneously the site of distortion, power and manipulation'. Perhaps this potential for distortion is why McLean (2006, 14) suggests that 'dissensus should be valued as much as, if not more than, consensus'. More importantly, Mouffe (2000, 756) regards consensus as 'a temporary result of a provisional hegemony, as a stabilization of power, and that it always entails some form of exclusion'. Taken together, these ideas suggest there may be an ongoing dialectic within any public sphere that may be challenging to negotiate, but important to attempt.

### 5.05 The HEI sphere

A major obstacle for the operationalisation of a Habermasian public sphere is that no tangible example exists, though several authors have attempted to adapt and pragmatise it. Habermas' (1989) original demarcation of the public sphere was bourgeois in origin, based upon the rational-critical debate of a burgeoning 18<sup>th</sup> century European civic society that he believed still has relevance to contemporary times. Hauser (1999) developed Habermas' ideas to envisage a more grounded version encompassing the voice of the population *en masse*. However, instead of attempting a single all-embracing sphere, it might be wiser to envisage smaller interconnected public spheres (Crossley 2004) that are actualised for different purposes. Discussing the feasibility of intersubjectivity within a Habermasian public



sphere, Brookfield (2010, 127) argues that 'True communicative action is a rarity in life, something that deliberately needs to be fostered'. In addition, Fleming (2010, 118) suggests that 'How to do this has to be learned' and I would argue that attempts toward democratisation of decision-making need also to be willed and supported in practice.

Amongst those exploring the feasibility of a Habermasian public sphere, there is theoretical support that HEIs provide a fertile space for accommodating a public sphere. Burawoy (2011, 40) envisages the university as an ideal space for a 'critical public sphere' where the HEI orchestrates debate as an advocate of 'deliberative democracy' (2011, 41). However, 'For Habermas, the university is colonised by the economy and the state and is in need of decolonisation by having particular kinds of free, critical conversations' (Fleming 2008, 13). Hence, whilst the HEI might provide space for the 'emancipatory impetus' (Edgar & Sedgewick 2002, 91) of a public sphere, it may *itself* require emancipation as indicated by some of the pathological findings. This problematises the HEI as a suitable space for communicative rationality somewhat.

Given all the challenges, some believe it might be more realistic to consider a partial and contingent public sphere that pursues Habermasian ideals but is not entirely preoccupied with attaining them. In support of this Chambers (1996, 202) suggested that 'It is perhaps unrealistic to think that we will ever achieve a perfectly discursive political culture [...] It is not unrealistic to hope that our political culture could become more discursive than it is now'. I contend that a specialised public sphere that originates from Ed Tech concerns, but may transcend them to tackle wider

concerns, is key to this research. The challenge might be to convincingly incorporate benevolent Ed Tech values into a public sphere that is meant to be coercion-free, without compromising its integrity as a communicatively rational space for intersubjective consensus.

## 5.06 Applying values in the sphere

I would argue that a combination of Habermasian ideals and benevolent academic values might give rise to a contingent and pragmatic sphere in the HEI.

Fundamentally, as part of this theory of communicative action, Habermas believed that the implied rules of the ideal speech situation (see below) was a way in which communicating subjects could evaluate each other responses in non-coercive and rational ways, driven by a mutual desire for consensus. However, there have been a range of more recent dialectical updates of the ideal speech situation through the work of Flyvbjerg (1998, 213), Culmsee & Awati (2011, 3), Cherem (2016, 31) and Fleming (2008, 13) to re-explore how the ideal speech situation might help to facilitate the HEI sphere.

Table 5 represents one way in which Habermas's ideal speech situation might be combined with the Ed Tech values identified in 5.03 for creating the conditions required to realise the HEI sphere, as discussed in the previous section. To the left of the Table are the amalgamated characteristics of the ideal speech situation (derived from the authors in the previous paragraph) alongside an indication of their approximated corresponding value in the second column. Suggestions for a values-driven set of ideal speech characteristics are in the third column, with operational

interventions detailed in the fourth column. Ultimately, what Table 5 provides is a starting point for how Habermas' ideal speech situation can be conceptually and pragmatically updated in order to create a series of potential interventions (column 4) to improve HEI stakeholder discourse.

**Table 5. Approaching a model for HEI meetings via the ideal speech situation**

<b>1. Amalgamated ideal speech characteristics</b>		<b>2. Approximated corresponding Value</b>	<b>3. Values driven ideal speech characteristics</b>	<b>4. Potential intervention</b>
1	All who might be affected by discussion should be invited.	<b>Solidarity</b> (empowerment of people to improve their sense of belonging).	All who might be affected should be empowered to participate in the discourse.	Identify all those potentially affected. Arrange early invitations to events, meetings, etc. Allow input before/after meeting for those who cannot attend.
2	All contributors given equal opportunity to speak and question others.	<b>Solidarity</b> (empowerment of people to improve their sense of belonging).	All contributors should be equally empowered to speak and question others as part of a community.	Trained facilitator observes meetings and intervenes to ensure the chair has been inclusive.
3	Contributors must be open to understanding others and willing to empathise.	<b>Enculturation</b> (fostering shared meanings and mutual understanding).	Contributors must be empathetic to mutual understanding and open to new shared meanings.	All contributors must openly share something they 'learned' from the meeting. This informs future discussion.
4	Contributors should be transparent and openly declare their intentions.	<b>Stabilisation</b> (renegotiation of social order).	Contributors should declare their intentions (if any) of what they hope to achieve from the discourse.	Chair of meeting sets example by being unequivocally honest about what s/he hopes to get from the meeting. Invites others to do same.
5	Contributors should be given adequate time for communication to occur.	<b>Solidarity</b> (empowerment of people to improve their sense of belonging).	Contributors should be allowed the time and space for communicative rationality to take place.	Extend meeting if required or offer to schedule a follow-up meeting.
6	Contributors should demonstrate willingness to accept new agreement.	<b>Enculturation</b> (fostering shared meanings and mutual understanding).	Contributors must accept the consensus of the group even if they personally object or disagree.	Provide a voice for the objections even after intersubjective agreement has been reached.
7	No contributor should be coerced into compromising their rights to 1-6 above.	<b>Integration</b> (rebuilding of social bonds).	The coercion-free support of 1-6 will help improve social bonds in a certain organisational group.	Trained facilitator checks for any perceptions of 'compromise' in 1-6 with each contributor after the meeting.

## 5.07 Technology circle

To provide a practical means for applying the interventions of column 4 of Table 5, I propose a technology circle for regular lifeworld meetings. This is loosely based upon the incremental ‘worker suggestion’ system of quality circles and kaizen principles, operating in a space akin to the Habermasian public sphere. The technology circle represents a forum through which change in the HEI might be discursively shaped through ‘the initiatives of opinion building associations’ (Habermas 1996, 302) that might ‘help to make teaching professionals themselves the agents of change’ (Laurillard 2008, 27). Japanese kaizen principles ‘make a concerted effort to involve employees in kaizen through suggestions’ (Imai 1986, 14). The hope is that ‘given the right conditions, many people in organizations will choose to use more of their abilities and experience to take part in solving work problems’ (Robson 1988, 4). By way of definition:

A quality circle is a group of employees who regularly meet on company time to discuss process-related issues. Usually the employees who participate in the quality group work in the same or similar work environments and are familiar with the same challenges. (Nelson 2015, 29).

There is no prescriptive remit for the activities, membership and operation of a quality circle, which varies according to different organisational needs. As an example, Hutchins (1985, 44) suggested the use of problem-solving activities through: brainstorming, data collection/analysis, cause and effect analysis, histograms and control techniques. Circles began in Japan in the early sixties ‘in order to build cheerful and meaningful places of work’ (Imai 1986, 101) so the remit can be very wide. The HEI technology circle, for example, might be based around

inclusive academic discussion of proposed systemworld Ed Tech initiatives.

Importantly, 'Quality circles are owned by the members' (Robson 1988, 8) who 'decide the problem they wish to tackle, how they tackle it and what solution they come up with' (Robson 1988, 55) which is why it is prudent to focus upon circle membership rather than activities and operations at this point.

Robson (1988, 7) believed that quality circles should be 'as unbureaucratic as possible' whereas more recently Tymieniecka (2012, 205) believes 'It is impossible to implement the kaizen conception or TQM in traditional bureaucratic culture'. Despite the aversion to bureaucracy, Nelson (2015, 32) suggests they should be 'implemented with enthusiastic and visible support from management', but Imai (1997, 11) believed this support should be an '*invisible* [my emphasis] but vital role in supporting such activities'. So, a non-bureaucratic management intervention could be important, but there is ambivalence over how conspicuous this should be. Whilst Kobayashi's (1990, 163) early view that 'Ideas conceived by the workers should also be executed by the workers' might be empowering, I do not believe execution of certain ideas would be possible without some level of management intervention:

Circles are taught that they, as well as everyone else, have to live in the real world, and that there will therefore be occasions when, for one reason or another, their solutions will not be accepted. As long as management is able to explain the reasoning behind decisions, Circle members will be able to live with them... (Robson 1988, 81).

This 'reasoning behind decisions' should be openly declared and subject to scrutiny, as discussed in the following section. One role of the technology circle might be to accommodate egalitarian and collaborative decision-making (Baker & Warren 2015, 141) through intersubjective agreement. The technology circle might be organised in

a similar fashion to traditional quality circles (e.g. self-governing weekly meetings of one hour in work time). Whilst quality circles represent affinity with Habermasian principles of participation, democracy and communication, they have historically lacked longevity in Western organisations compared to their more successful Eastern versions (Hutchins 1985, 122). Advocates of quality circles believe they have a high mortality rate due to the lack of senior management affinity and support: 'The need for commitment from senior management is a much quoted requirement; indeed, in one sense, it is a prerequisite of any in-company initiative' (Robson 1988, 73).

## 5.08 Steering committee

A carefully conceptualised internal steering committee could be imperative to the genesis and facilitation of the technology circle discussed in the previous section. See Table 6 (below) as an example of how the steering committee might take shape and how it might then facilitate the implementation of a technology circle. Hutchins (1985, 190) believed that 'the steering committee provides a cross functional supportive framework for the circle programme development' which 'will be "in touch" or "wired in" to the feelings of all members of staff' (1985, 171). One purpose of the steering committee might be to deliberate the intentions of the proposed technology circle (Table 6, steps 1 and 4), support its inception and resource it (steps 1-5). The steering committee might also evaluate and actualise suggestions that emerge from the ensuing technology circle (step 8 and 9). Whilst the steering committee provides the intervention required from senior management (as covered in the literature review, 2.1.8) it should not infringe upon the semi-autonomous operation of the

technology circle once established (e.g. membership remaining voluntary, setting its own agenda and managed by self-appointed leadership). Table 6, step 10 alludes to the importance of technology circle autonomy.

Whilst the intervention of a senior management steering committee might seem discordant with the findings of the thesis, six out of twelve participants articulated measured support for management intervention under certain conditions. For example, a previously quite critical Bob accepted that “we need management and we need administration and we need a central body that ensures the institution is in good health”. In relation to staff development, Hugh also believed that “there needs to be a mechanism whereby the university or the institution forces the stragglers to eventually accept the inevitable.” Kim also admitted that “I have to admit I was forced to do a lot of what I’m doing”, suggesting that even unpopular management mandates can have acceptable outcomes. As with the technology circle itself, the membership of the steering committee should be voluntary (Hutchins 1985), yet Brookfield (2010, 133) suggests that a wholly voluntary approach to membership is problematic:

the problem with this ideal is that judgements as to which are the relevant voices to be heard, how relevance itself is to be determined, how we decide which are the best arguments, and who estimates exactly what is the present state of our knowledge, are all highly contentious. They could easily become the property of an elite cadre of communication specialists whom we look to when trying to assess how well we’re communicating. If we’re not careful we end up privileging the very experts Habermas is trying to restrain.

This is arguably where mandated hybrid leadership, first discussed in the literature review, may be critical for a steering committee aiming to establish a new technology circle. If the membership of the steering committee (Table 6, step 1) is too narrow,



political or unrepresentative, there might be parallels evident in the ensuing technology circle. Robson (1988) identified the role of the *co-ordinator* (step 1) as a senior internal position to administer and support the circle, and the *facilitator* (step 2) as a part-time and temporary catalyst role to inaugurate the circle and develop circle autonomy beyond him/herself. However, once the technology circle is established and autonomous beyond the temporary *facilitator* (step 10), the original hybrid approach to the leadership of the steering committee might mean that the technology circle is less likely to 'become a personality cult' (Hutchins 1985, 171).

**Table 6. How a steering committee might implement a technology circle**

1.Objectives in sequence		2.Advice & Suggestions	3.Goal & Values
1	<i>Co-ordinator</i> (senior manager with access to resources and executive) invites volunteers to join the hybrid leadership of the steering committee, with one representative from each level of the HEI (i.e. University Executive, Dean, Associate Dean, HoD, lecturer, student, union rep, IT specialist, quality circle specialist – external and to be appointed) up to a maximum of ten people.	It might be important for the <i>Co-ordinator</i> to be a committed quality circle enthusiast, though expertise is not necessary. Create reserve list if there is more than one volunteer for each level. If no volunteers emerge from a particular 'level' then try again. Ensure <i>Co-ordinator</i> is aware of the Ed Tech values.	<b>Solidarity</b> of steering committee, formed of hybrid leadership with a reserve list if there is membership dropout.
2	Steering committee appoints a temporary quality circle experienced <i>Facilitator</i> contractor that joins the steering committee. <i>Co-ordinator</i> remains chair of the steering committee.	This is a vital unhurriable decision. Allow time for the idea to 'bed in' and be evaluated before wider dissemination.	Induction and incorporation of a <i>Facilitator</i> that is familiar with quality circle programmes complete.
3	<i>Facilitator</i> provides training to all members of the steering committee	Vital step. Must be given adequate time to complete. Ensure that a mechanism for ensuring Ed Tech values is discussed.	Fully informed steering committee with commitment to values ( <b>Solidarity, Enculturation</b> ).
4	Steering committee appoints a circle <i>Leader</i> for pilot circle, who is then trained (and informed of Ed Tech values) by <i>Facilitator</i> .	<i>Leader</i> may not be a fixed appointment. Ongoing leadership rotation of circle will be decided by circle members once established.	Pilot circle <i>Leader</i> appointed.
5	<i>Facilitator</i> and <i>Leader</i> to seek volunteers for the circle, who are then trained by the <i>Leader</i> .	It is important that circle training is done by the <i>Leader</i> so that the <i>Facilitator</i> is not needed long term	Trained circle populated and ready to meet. ( <b>Solidarity, Enculturation</b> ).
6	Circle meets for first pilot meeting, chaired by <i>Leader</i> and guided by the <i>Facilitator</i>	This is a crucial first meeting that developed the modus operandi of the circle that cannot be known or planned.	Open discussion helps provide <b>Solidarity</b> and <b>Enculturation</b>
7	Circle meets frequently with attendance by <i>Facilitator</i>	One-hour weekly meeting in paid work time should suffice.	Regularity and dynamic of circle established for <b>Stabilisation</b> .
8	Circle meets less frequently with steering committee representative and <i>Facilitator</i> to present ideas and solutions. The decisions around which ideas to implement is communicatively agreed.	One hour monthly in paid work time again. It is important that a reasonable consensus about the 'best' ideas is arrived at within the meeting.	The <b>Integration</b> of both groups assists more <b>Enculturation</b> .

9	Steering committee implements selected solutions and announces this throughout the HEI.	Again, it is crucial that these implemented solutions are publicly attributed to the circle. Good for morale and might encourage others to join in or form another circle.	The circle is seen to be productive with tangible results, however small or incremental ( <b>Solidarity</b> ).
10	Once fully established as a self-sufficient group, the <i>Facilitator</i> leaves the membership of the technology circle but is available for support until the contract ends. The <i>Co-ordinator</i> then becomes a senior point of contact for the technology circle.	<i>Facilitator's</i> goal is to create self-sufficient circles so might then help to start others. The autonomy of the technology circle should result in 'light touch' dependence upon the <i>Co-ordinator</i> .	<b>Stabilisation</b> of Circle programme pilot established. Hopefully there is interest and motivation for others to form circles.

## 5.09 Recommendations for practice

My recommendations for practice are included here, rather than in the conclusion, since they are closely related to the preceding section and Table 6 (above). The recommendations are based on how the HEI might formulate a steering committee whose role it is to establish a technology circle. However, the way in which a circle programme might be implemented should remain flexible, so this section is quite suppositional and intended as an illuminating set of suggestions only.

Robson (1988, 79) made it clear that 'For a Circles programme to stand a chance of success, resources must be put behind it. It is vital that everyone recognises that Quality Circles represent an investment that has to be paid for – it is not free'. For example, the *facilitator* role (Table 6, step 2) requires significant monetary investment to identify and salary a suitable individual. Beyond budgetary implications there is also an impact on circle staff time, the allocation of which may now require management support. Perhaps more importantly, circle programmes are intended to provide a continuous incremental change that culminates in the hope for a longer

term paradigm shift in culture. This takes time, so it is important that we ‘do not attempt to change things overnight’ (Robson 1988, 8). As such, there is deliberately no indication of timescale across each of the ten steps of Table 6.

As seen in Table 6, the second task of the steering committee might be to appoint an externally trained temporary *facilitator*. The *facilitator* would normally mentor, train and support the implementation period of quality circles (step 3-9) to the point that their role would be purposefully expendable by the end of their fixed term contract (step 10). Formal training provided by the *facilitator* might begin with members of the steering committee (step 3) before moving on to the circle *leader* (step 4), who would then train the other members of circle (step 5). Whilst historical quality circles were advised to avoid deliberating issues they cannot control, I believe such ‘Non Circle controllable’ issues (Hutchins 1985, 47) *should* be discussed with senior management (steps 8 and 9) especially since many of the participant concerns around Ed Tech in the findings were related to matters seemingly beyond Ed Tech. Another guiding principle, to differentiate a Habermasian technology circle from ill-fated previous Western incarnations of the quality circle, might be to facilitate and resource the ‘potential interventions’ column 4 seen in Table 5 (see above). These interventions might be based upon a combination of the ideal speech situation (Habermas) with the values identified in section 5.03 (above). This gives the technology circle a more specific Ed Tech focus based upon the findings of this thesis.

I propose that ‘there is nothing wrong in the manager “looking in” occasionally during a Circle meeting’ (Hutchins 1985, 136) and this might happen every month (Table 6,

step 8) for example. Such a monthly meeting of the technology circle with at least one representative of the steering committee would be where the systemworld discursively engages with the lifeworld, yet this only occupies a quarter of their monthly meeting time. This allows circle members to present their ideas to management directly (a crucial role of circle programmes) and allows the steering committee to deliberate the feasibility of circle-born ideas.

The most important guideline may be that the steering committee is co-ordinated by an advocate of kaizen or quality circles (Table 6, step 2) and is committed to the Ed Tech values found in this research (step 3). Also, each member of the committee should be committed to the Ed Tech values identified in Table 4 (column 4) and the approach to meetings identified in Table 5. They must also be amenable to external training and facilitation as part of an incremental cultural shift required for the technology circle to have impact. What these recommendations propose is a pragmatic manifestation of a Habermasian public sphere in the HEI in relation to Educational Technology implementation.

## **5.10 Research contribution**

Exploring the relevance of Habermas for social research, Murphy (2017, 1) argues that 'Habermas saw the real value of social theory (including his own) in its capacity to illuminate forms of research practice'. However, Alvesson & Skoldberg (2009, 153) suggest that 'he does not take very much interest in the empirical or practical application of his ideas'. If true, my study provides the possibility of a pragmatic application of adapted Habermasian ideals for Ed Tech change. Compared to

Bourdieu and Foucault 'his uptake in the field of education has not been as wide-ranging' (Murphy & Fleming 2010, 4) which is 'unfortunate, given that his theory lends itself well to a critique, among other issues, of performance and audit cultures, managerialism' (Murphy 2010, 78). My research also provides a critique of systemworld based educational managerialism by conceptualising technology as a medium for wider ideological interests: a fertile explorative direction that Habermas himself did not address.

I suggested in the literature review that a communicatively rational public sphere, facilitated by hybrid leadership might be one way to improve the delicate equilibrium between systemworld and lifeworld within the HEI. Murphy (2017, 14) reminds us that Habermas's own originality emerged from dialectical exchange with others, and is not set in stone, so I believe it is acceptable to adapt his ideas for a specific purpose and explore secondary material to update his original ideas that were envisaged in a different historical context to today. I aimed to 'overcome some barriers in the process of giving voice to clients' (Woelders & Abma 2017, 123) for academics in the HEI. The originality of my approach is that, despite offering a thorough critical examination of systemworld based technology, I suggest that well informed representatives from the systemworld (e.g. members of the steering committee for the technology circle) should support the initiatives from the technology circle. Whilst there is not yet a convincing exemplar of a public sphere (the Internet being the closest *virtual* space) this research provides a partial attempt towards a tangible application in the HEI.

There were also some unexpected findings as part of my research journey. Considering my original insider critical lens, I did not expect a very critical Bob to change his views about his previous interview data. Neither did I expect a defiant Fay to admit the benefit of systemworld intervention into her practice or a tech enthusiast like Kim to reject a new tech initiative in the robust way that she did. These were all revelations that emerged through follow-up interviews, as did the unexpectedly positive comments about Digital Campus. Most surprisingly, as an insider who originally expected to gather extended critical narratives about Ed Tech, I did not expect my own organisational position and worldview to vacillate – which I believe has enhanced the research due to the more balanced perspective at my disposal.

### **5.11 Limitations of the research**

One limitation of my research is that my data collection began as a convenience sample of colleagues because of my preoccupation with insider access to participants. I also hoped to obtain more participant discussion directly about pedagogy, but participants seemed more concerned with perceived limits imposed by the systemworld upon their academic practice. Also, this research only provides data from academics in one specific section of one post-1992 HEI, so there may be a need to investigate (a) elsewhere in this HEI and (b) in other HEIs. Perhaps the most salient limitation is the reorganisation of my case study of academic perceptions over a decade of Ed Tech change from participant stories to historical phases of change; which meant that the timing of the final round of interviews did not capture as much as hoped in relation to the (then) unfolding Digital Campus era.

At times, I demonstrated a propensity for my findings to be absorbed too readily into a Habermasian taxonomy. For example, some of the data findings could be interpreted as different pathologies and the complexity of the data might benefit from more critique rather than potentially over-simplified thematic categorisation. Finally, though my research is focused upon the voice of academic lifeworlds, I interviewed only Greg as the sole systemworld perspective as alternative to the academic voice and this may not have provided enough discursive balance in hindsight.

## 5.12 Conclusion

By the end of the findings chapter, my inquiry had identified several pathologies (i.e. anomie, alienation, disintegration and social instability) in at least two of the three main phases of change. In this discussion chapter those pathologies were inverted into the underlying values (i.e. enculturation, stabilisation, solidarity and integration) that appear to be important, if unarticulated, to participants during Ed Tech change. I argued that these values could be used to facilitate a contingent public sphere in the HEI in the form of a technology circle based upon the Habermasian ideal speech situation alongside quality circles of kaizen origin. I recommended mandatory hybrid leadership for the steering committee that establishes the technology circle and provided recommendations for how this might be actualised.

Essentially, what the discussion offers to the field of study is a reasonable suggestion for approaching a practical and flexible Habermasian public sphere that is focused on the implementation of HEI Ed Tech. The purpose of the technology



circle is to consider how the systemworld and lifeworld may be engaged in meaningful dialogue to help re-inform *and* reform each other through ongoing opportunities for intersubjective consensus. This could be one practical way in which the equilibrium between systemworld and lifeworld might be supported towards the Habermasian ideal of more harmonious symbiosis between them. I believe that communicative reason, via pragmatic discursive practice and intersubjective consensus, is what helps to achieve a robust mechanism for ongoing Ed Tech change in the HEI. I hope that such a discursive mechanism might also assist change in other HEIs and perhaps even provide insights into concerns beyond Educational Technology.

## Chapter Six: Conclusion

### 6.1 Research questions

To conclude the thesis, I begin with a focus upon the research questions, starting with RQ1: How has the role of Educational Technology developed in the post-1992 HEI? The literature review indicated that certain presumptions about Ed Tech possibilities appear to have initiated a culture of technological rationality and tech positive discourses, perhaps leading to some of the prevalent Ed Tech research trends discussed. Evolving leadership of the post-1992 HEI alongside growing expectations of its role may have catalysed the influence of neo-liberal values upon Ed Tech procurement. I outlined the potential for ongoing socio-determinist approaches as an alternative way to consider Ed Tech change that might accommodate a voice for academic input. Such a voice, suitably incorporated, might assist the decolonisation of the lifeworld towards a more balanced systemworld and lifeworld equilibrium where neither dominates the other in the HEI.

Data was gathered from twelve participants over three rounds of interviews in relation to RQ2: How do academics articulate their perceptions of Educational Technology implementation in the post-1992 HEI? The negative pathological perceptions (suspicion, cynicism, resistance, displacement and lack of confidence) were usually concerned with matters beyond education and technology (e.g. the hegemony of administrative and managerial systems during times of change). These negative ideas resulted in predominantly guarded and distrusting participant perceptions due to 'incongruent' historical phases of formal and political change.

However, some participants expressed optimism for the more favourable collegial change approach taken with the Digital Campus era. Whilst some participants positioned themselves as recalcitrant towards any Ed Tech change because of legacy experience, the more positive experiences around Digital Campus suggested there might be a way to explore more intersubjective leadership of Ed Tech.

Fundamentally, participants indicated a desire for more influence during periods of organisational Ed Tech change. They generally accepted the need for systemworld interventions, although they sought a systemworld that is perhaps more empathetic towards lifeworld values. To address my preference for longevity in my contribution to practice, a mechanism for evaluating ongoing future Ed Tech possibilities was explored, addressed next.

A flexible Habermasian conceptual framework allowed me to reconceptualise the negative pathological perceptions more constructively: I argued that a desire for more benevolent underlying values underpinned participant perceptions, though such values were rarely articulated overtly during interviews. This helped me to address RQ3: How might academic perceptions be used to influence implementation of HEI Educational Technology? By inverting the pathologies of anomie, disintegration, alienation, social instability into the corollary *values* of enculturation, integration, solidarity, stabilisation, it was possible to envisage an organisational technology circle to improve Ed Tech change in the HEI. This would combine the egalitarian and discursive principles of the public sphere with the benevolent lifeworld values identified to improve implementation in *partnership* with the systemworld rather than at the expense of it. As such, academic perceptions may indeed influence Ed Tech change in the HEI, but this is probably because they: (a)

they suggest that something might be awry in HEI Ed Tech implementation, (b) appear to be underpinned by a penchant for benevolent Ed Tech values (as the corollary of pathologies), and (c) implicitly express the desire for communicative rational input during times of Ed Tech change.

Whilst a tangible manifestation of Habermas's ideal public sphere might be optimistic, perhaps due to the challenges of realising truly undistorted communication, a contingent values-driven and partial Ed Tech discursive sphere is possible by combining the approach of quality circles in conjunction with Habermasian principles of communicative action. The discussion chapter offered a feasible and flexible approach to realising such a contingent sphere in the HEI, a sphere that might operate in accordance with more benevolent lifeworld values when considering more inclusive Ed Tech change. To summarise, the academic voice can be reasonably incorporated for rebalancing the systemworld and lifeworld within a contingent version of the public sphere, provided it is encouraged and supported from the outset by senior management as representatives of the formal HEI systemworld.

## 6.2 Impact of the research

As first summarised in section 5.10, this research offers an example of how critical theory might be applied to understanding the management of Educational Technology in the HEI. Taking as its premise the paucity of academic critique and seeking the academic perceptions of tech ubiquity as educational panacea, the thesis explores how pessimism can be embraced pragmatically. It conceptualises Ed

Tech as a hegemonic medium for a neoliberal systemworld (Techgerialism) that might benefit from accommodating a communicatively regenerative lifeworld through a mechanism for undistorted communication in the HEI. The research explores the possibility that unexpressed values, as the corollary of the pathologies found in the data, which are crucial to the originality of this research and for informing the mechanism for Ed Tech change in the HEI.

The research is important because it offers the possibility of exploring change that is rooted in the force of the stronger communicative argument that originates from the under-explored academic voice, as justified in the literature review. This possibility of facilitating Habermasian 'undistorted communication' means that any stakeholder voice, however critical, can be rescued from being dismissed as 'doomster' discourse (Selwyn 2014). The approach for change is rooted in social determinism and seeks to balance the lifeworld with the systemworld, so that both can work in harmony rather than in opposition. Whilst my research is critical towards certain managerial practices of the HEI systemworld, it recognises the organisational importance of a well-*informed* systemworld when leading on change. In other words, the recommendations of this thesis are only achievable in conjunction with the systemworld, rather than independently. Such an approach is also likely to be more palatable for systemworld-based leadership to accept and adopt.

As such, the thesis provides a theoretical augmentation of Habermasian ideals towards a tangible conceptualisation of specific values that might help to nullify the impact of unhelpful pathologies. A methodological contribution comes from the denouement found in the research design chapter (section 3.10 onwards), offering a

way in which other HEIs might investigate for pathologies in their own context.

Finally, an achievable mechanism for realising the normally utopian Habermasian public sphere offers a unique contribution to HEI practice. Each of these theoretical, methodological and pragmatic contributions might be viewed as the justification for the 'research batons' to be taken up by section 6.3. Further research impact arises from addressing an empirical gap in knowledge, such as emphasising the oft-overlooked voice of academics during times of change.

Beyond the research questions and knowledge gap my research indicates that, even behind controversial academic perceptions, there are underlying values that are not immediately obvious, and these can be identified and embraced for change. Since the Digital Campus change process was better received by at least *some* participants suggests there might be a more useful way to consider the academic voice for more effective change. My research hopes that the 'us vs them' academic and management dichotomy might one day become a more enlightened 'us' and more enlightened 'them' to achieve a more harmonious 'us *with* them' equilibrium for change through a more cooperative HEI systemworld and lifeworld.

Another way of envisaging the research is as a narrative of enlightenment. The first two changes phases demonstrated the naïve belief of senior management that formal change (i.e. Blended Learning) and political change (i.e. VLE Review) could result in academically tolerable Ed Tech implementation. However, the later Digital Campus change phase appeared to resemble the grassroots of collegial change. There was also my own critical insider status in round one that wished to empower the academic voice towards emancipation. My research initially sought to illuminate

academic perceptions narratively to chastise those responsible for misguided historical Ed Tech change. However, it evolved into a more responsible and balanced inquiry that still absolutely recognises the crucial role of the academic voice as part of a more measured and complex organisational dichotomy.

### 6.3 Recommendations for further research

I envisage a number of worthwhile possibilities for my own post-doctoral journey as well as a variety of ‘research batons’ that other researchers might pursue at the host HEI or beyond. These are based upon improving, critiquing and developing my research. Each possibility could be considered in isolation or could be explored collectively depending upon the overall research intentions and motivations of the researcher.

One research baton might be to improve the robustness and data reach of my research. Having initially gathered convenience data as an insider with an unforeseen changing organisational perspective, others might explore perceptions of Ed Tech change in another school or faculty in the same HEI. This might help to establish if the research findings are unique to my participants or representative of others in the host HEI. A fourth round of interviews could be conducted to provide more detailed perceptions of Digital Campus, in a more advanced phase of change at the time of thesis submission. Or, at risk of ethically damaging participant privacy, a focus group of all the remaining employed participants could be a particularly illuminating and iterative method to explore. However, the possibility of participant

harm (i.e. participants become increasingly identifiable) is increased significantly through this method and internal ethical clearance might be challenging accordingly.

Another research baton would be to critique my research to gain further insights from the existing data. Given the requirement to aggregate and condense masses of participant data into a thesis of this size there are still many possibilities for re-exploring the very comprehensive data gathered with different analytical approaches to provide fresh perspectives. For example, despite my commitment to communicatively rational interviews, Foucauldian discourse analysis might investigate the 'hidden' changing power relationships *within* the interview transcripts in relation to my changing role by round three. This might illuminate unforeseen insights into the existing data and offer more nuanced conclusions for this study.

Another approach might be to develop my research to see how the findings might be discoverable elsewhere, which might be a critical first step towards relatability of findings. Whilst I agree that 'all researchers strive for some degree of generalizability for their results' (Shulman 1981, 8), I cannot claim generalisability for my findings with the scale of my existing investigation. Riessman (2008) suggests generalising to theoretical propositions, or general concepts, which are outcomes that are potentially transferable to other situations. Bassey (2001) champions the idea of 'fuzzy generalisation' that is expressed tentatively as partial and contingent findings that may be true in other similar circumstances. As such, it would be interesting to see if the Ed Tech pathologies found in my research are replicated in other HEIs.



At risk of isomorphism, my recommendations for further research would be to repeat the denouement of the methodological approach in other HEIs to see to what extent the Ed Tech pathologies might be found there. Also, my initial intention to gather 'rich' narratives of academics undergoing pedagogic change did not emerge in my research but may be apparent in other HEIs. However, ultimately 'In social research, knowledge is concerned not with generalisation, prediction and control but with interpretation, meaning and illumination' (Usher 1996, 18). As such, the most important 'research baton' in my view is to investigate ways in which the academic voice can be investigated, democratised and empowered in other HEIs through any conceptual means that might improve practice. To summarise the research recommendations:

1. Consider a fourth round of interviews, or a focus group, for increased understanding of the final phase of change still unfolding during my research.
2. Re-explore the existing comprehensive data. For example, Foucauldian Discourse Analysis might question the feasibility of communicative rationality.
3. Apply the research design denouement in other HEIs to see if the pathologies found herein are replicated elsewhere, perhaps beyond Ed Tech.
4. Investigate other ways in which the academic voice might be further investigated and applied to improve practice.

(42,336 words)

## References

- Adekola, J, Dale, V. and Gardiner, K. (2017) Development of an institutional framework to guide transitions into enhanced blended learning in higher education. *Research in Learning Technology*, **25**, pp. 1-16.
- Adelman, C.; Kemmis, S. and Jenkins, D. (1980) Rethinking case study: Notes from the second Cambridge conference. in Simons, H. (ed.) (1980) *Towards a Science of the Singular*. Norwich: Centre for Applied Research in Education, University of East Anglia, pp. 45-61.
- Agre, P. (2002) Commodity and community: Institutional design for the networked community. in Robins, K. and F. Webster (eds.) (2002) *The virtual university?: Knowledges, markets, and management*. Oxford: University Press, pp. 210-226.
- Althusser, L. (1971) Ideology and ideological state apparatuses (notes towards an investigation). in Althusser, L., Brewster, B.R. (1971) *Lenin and philosophy, and other essays*. London: NLB, pp. 127-186.
- Alvesson, M. and Sköldbberg, K. (2009) *Reflexive methodology: New vistas for qualitative research*. 2<sup>nd</sup> ed. London: SAGE.
- Amiel, T. and Reeves, T. (2008). Design-based research and educational technology: Rethinking technology and the research agenda. *Educational Technology and Society*, **11**(4), pp. 29–40.
- Amory, A. (2010). Learning to play games or playing games to learn? A health education case study with Soweto teenagers. *Australasian Journal of Educational Technology*, **26**(6), pp. 810-829.
- Andalo, D. (2011) Pressure on academics to generate alternative income for universities. *The Guardian* [online]. 28 March. [Accessed 4 March 2018]. Available at: <<https://www.theguardian.com/higher-education-network/blog/2011/mar/28/academics-businesses-alternative-income-universities>>.
- Anderson, G. (2004) Creating effective, equitable, and democratic schools. in English, F.W. (ed.) (2004) *The SAGE handbook of educational leadership: Advances in theory, research, and practice*. London: SAGE, pp. 187-190.
- Anderson, L. (2003) A leadership approach to managing people in education. in Kydd, L., Anderson, L., Newton, W. and Open University (2003) *Leading people and teams in education*. London: Open University in association with Paul Chapman, pp. 11-26.
- Anderson, P. (1998) *The origins of postmodernity*. London: Verso.
- Andrews, M. (2000) *The uses of narrative: Explorations in sociology, psychology, and cultural studies*. New Brunswick, N.J.: Transaction Publishers.

Andrews, M. (2007) Exploring cross-cultural boundaries. in Clandinin, D. (2007). *Handbook of narrative inquiry: Mapping a methodology*. London: SAGE, pp.489-511.

Andrews, R. and Haythornthwaite, C. (eds.) (2007) *The SAGE handbook of e-learning research*. London: SAGE.

Appignanesi, R., Garratt, C., Sardar, Z. and Curry, P. (1999) *Introducing postmodernism*. Cambridge: Icon.

Arribas-Ayllon, M. and Walkerdine, V. (2008) Foucauldian discourse analysis. in Willig, C. and Stainton-Rogers, W. (eds.) (2008) *The SAGE handbook of qualitative research in psychology*. 2<sup>nd</sup> ed. London: SAGE, pp. 110-123.

Ashwin, P. (ed.) (2006) *Changing higher education: The development of learning and teaching (SEDA Series)*. London: Routledge.

Ashwin, P. (2012) *Analysing teaching-learning interactions in higher education: Accounting for structure and agency*. London: Continuum.

Aspland, T. (2003) A research narrative: Confronting the tensions of methodological struggle. in O'Donoghue, T.A. and Punch, K. (2003) *Qualitative educational research in action: Doing and reflecting*. London: Routledge/Falmer, pp. 126-151.

Athique, A. (2013) *Digital media and society: An Introduction*. Cambridge: Polity.

Atkinson, P. and Delamont, S. (2006) Rescuing narrative from qualitative research. *Narrative Inquiry*, **16**(1), pp. 164-172.

Attwell, G. and Hughes, J. (2010) *Pedagogic approaches to using technology for learning: Literature review* [online]. [Accessed 17 March 2018]. Available at: <<http://webarchive.nationalarchives.gov.uk/20110404220756/http://www.lluk.org/wp-content/uploads/2011/01/Pedagogical-approaches-for-using-technology-literature-review-january-11-FINAL.pdf>>.

Austen, L., Parkin, H., Jones-Devitt, S., McDonald, K. and Irwin, B. (2016) Digital capability and teaching excellence: An integrative review exploring what infrastructure and strategies are necessary to support effective use of technology enabled learning (TEL) [online]. [Accessed 16 March 2018]. Available at: <<http://www.qaa.ac.uk/en/Publications/Documents/Digital-capability-and-teaching-excellence-2016.pdf>>.

Awati, K. (2013) *The system and the lifeworld: A note on the gap between work and life* [online]. [Accessed 23 February 2018]. Available at: <<https://eight2late.wordpress.com/2013/02/07/the-system-and-the-lifeworld-a-note-on-the-gap-between-work-and-life>>.

Baker, T. and Warren, A. (2015) *Conversations at work: Promoting a culture of conversation in the changing workplace*. Basingstoke: Palgrave Macmillan.

- Barnett, R. (1997) *Higher education: A critical business*. Buckingham: Open University Press.
- Barnett, R. (2000) *Realizing the university*. University of London: Institute of Education.
- Barnett, R. (2003) *Beyond all reason: Living with ideology in the university*. Buckingham: SRHE and Open University Press.
- Basit, T. (2010) *Conducting research in educational contexts*. London: Continuum.
- Bassey, M. (2001) A solution to the problem of generalisation in educational research: Fuzzy prediction. *Oxford Review of Education*, **27**(1), pp. 5-22.
- Bathmaker, A. and Harnett, P. (2010) *Exploring learning, identity, and power through life history and narrative research*. London: Routledge.
- Beach, L. (2009) Decision making: Linking narratives and action. *Narrative Inquiry* **19**(2), pp. 393-414.
- Becher, T. and Trowler, P. (2001), *Academic tribes and territories: Intellectual enquiry and the cultures of disciplines*. 2<sup>nd</sup> ed. Buckingham: Open University Press.
- Beetham, H. and Sharpe, R. (2013) *Rethinking pedagogy for a digital age: Designing for 21<sup>st</sup> century learning*. 2<sup>nd</sup> ed. London: Routledge.
- Behar, R. (1996) *The vulnerable observer: Anthropology that breaks your heart*. Boston: Beacon Press.
- Bell, J. and Harrison, B. (eds.) (1996) *Vision and values in managing education: Successful leadership principles and practice*. London: David Fulton.
- Bell, J. and Harrison, B. (1998) *Leading people, learning from people: Lessons from education professionals*. Buckingham: Open University Press.
- Bennett, N., Crawford, M. and Cartwright, M. (eds.) (2003) *Effective educational leadership*. London: Open University in association with Paul Chapman.
- Benson, L. and Harkavy, I. (2002) Saving the soul of the university: What is to be done?. in Robins, K. and F. Webster (eds.) (2002) *The virtual university?: Knowledges, markets, and management*. Oxford, Oxford University Press, pp. 169-209.
- Bernstein, R.J. (1991) *The new constellation: The ethical-political horizons of modernity/post-modernity*. Massachusetts: MIT Press.
- Bersin, J. (2004) *The blended learning book*. San Francisco: Pfeiffer.
- Bhabha, H. (2004) *The location of culture*. London: Routledge.

Bijker, W., Hughes, T. and Pinch, T. (1987) *The social construction of technological systems: New directions in the sociology and history of technology*. London: MIT Press.

Birch, D. and Burnett, B. (2009) Bringing academics on board: Encouraging institution-wide diffusion of e-learning environments. *Australasian Journal of Educational Technology*, **25**(1), pp. 117–134.

Blaug, R. (1995) Distortion of the face-to-face: Communicative reason and social work practice. *British Journal of Social Work*, **25**, pp. 423-439.

Bohman, J. (2014) *Jürgen Habermas* [online]. [Accessed 8 May 2018]. Available at: <<https://plato.stanford.edu/entries/habermas/>>.

Boje, D. (2001) *Narrative methods for organizational and communication research*. London: SAGE.

Bold, C. (2012) *Using narrative in research*. London: SAGE.

Bolden, R., Hawkins, B., Gosling, J. and Taylor, S. (2011) *Exploring leadership: Individual, organizational, and societal perspectives*. Oxford: University Press.

Bolden, R., Witzel, M. and Lincare, N. (eds.) (2016) *Leadership paradoxes: Rethinking leadership for an uncertain world*. London: Routledge.

Boler, M. (1999) *Feeling power: Emotions and education*. London: Routledge.

Bolman, L. and Deal, T. (1984) *Reframing organizations: Artistry, choice and leadership*. London: John Wiley and Sons.

Bond, E. and Goodchild, T. (2013). Paradoxes and professionalism: An exploration of lecturers' perspectives on technology enhanced learning. *Journal of Applied Research in Higher Education*, **5**(1), pp. 72-83.

Bordwell, D. and Kristin, T. (1993) *Film art: An introduction*. 3<sup>rd</sup> ed. Mc-Graw-Hill.

Bourdieu, P. (1992) *An invitation to reflexive sociology*. Chicago: University of Chicago Press.

Braaten, J. (1991) *Habermas's critical theory of society*. New York: SUNY Press.

Brace, I. (2004) *Questionnaire design: How to plan, structure, and write survey material for effective market research*. London: Kogan Page.

Braun, V. and Clarke, V. (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology*, **3**(2), pp. 77-101.

Brookfield, S. (2010) Learning democratic reason: The adult education project of Jurgen Habermas. in Murphy, M. and Fleming, T. (eds.) (2010) *Habermas, critical theory and education*. London: Routledge, pp. 125-136.

- Brosnan, M. (1998) *Technophobia: The psychological impact of information technology*. London: Routledge.
- Brown, R. and Carasso, H. (2013) *Everything for sale?: The marketisation of UK higher education*. London: Routledge.
- Brown, S. (2014) You can't always get what you want: Change management in higher education. *Campus Wide Information Systems*, **31**(4), pp. 1-10.
- Brundrett, M. (1998) What lies behind collegiality, legitimation or control?. *Educational Management and Administration*, **26**(3), pp. 305-16.
- Burawoy, M. (2011) *Redefining the public university: Developing an analytical framework* [online]. [Accessed 15 April 2018]. Available at: <<http://publicsphere.ssrc.org/burawoy-redefining-the-public-university/>>.
- Burton, D. and Bartlett, S. (2009) *Key issues for education researchers*. London: SAGE.
- Bush, T. (1995) *Theories of educational management*. 2<sup>nd</sup> ed. London: Paul Chapman.
- Bush, T. (2008) *Leadership and management development in education*. London: SAGE.
- Bush, T. (2011) *Theories of educational leadership and management*. 4<sup>th</sup> ed. London: SAGE.
- Bush, T. and Bell, L. (eds.) (2002) *The principles and practice of educational management*. London: Paul Chapman.
- Bush, T. and Bell, L. (eds.) (2010) *The principles of educational leadership and management*. 2<sup>nd</sup> ed. London: SAGE.
- Bush, T. and Middlewood, D. (2005) *Leading and managing people in education*. London: SAGE.
- Cameron, D. (2001) *Working with spoken discourse*. London: SAGE.
- Carr, D. (1986) *Time, narrative, and history*. Bloomington: Indiana University Press.
- Carruthers, P. (1989) *Introducing persons: Theories and arguments in the philosophy of the mind*. London: Routledge.
- Casey, T. and Embree, L. (1990) *Lifeworld and technology*. Michigan: Center for Advanced Research in Phenomenology and University Press of America.

- Castelló M. and Botella, L. (2006) Constructivism and educational psychology. *in* Kincheloe, J. and Horn, R. (eds.), *The Praeger handbook of education and psychology*. Westport, CT: Praeger, pp. 263-270.
- Chambers, S. (1996) *Reasonable democracy: Jürgen Habermas and the politics of discourse*. Cornell: University Press.
- Charmaz, K. (2006) *Constructing grounded theory: A practical guide through qualitative analysis*. London: SAGE.
- Charmaz, K. (2011) Grounded theory methods in social justice research. *in* Denzin, K.N and Lincoln, S. Y. (2011) *Handbook of qualitative research*. 4<sup>th</sup> ed. London: SAGE, pp. 359-380.
- Chase, S. (2011) Narrative inquiry: Still a field in the making. *in* Denzin, K.N and Lincoln, S. Y. (2011) *Handbook of qualitative research*. 4<sup>th</sup> ed. London: SAGE, pp. 421-434.
- Checkland, P. and Scholes, J. (1999) *Soft systems methodology in action*. West Sussex: John Wiley and Sons.
- Cherem, M. (2016) *Jürgen Habermas 1929 – [online]*. [Accessed 29 January 2018]. Available at: <<http://www.iep.utm.edu/habermas/>>.
- Clandinin, D. (2007). *Handbook of narrative inquiry: Mapping a methodology*. London: SAGE.
- Clandinin, D. and Connelly, F. (2000) *Narrative inquiry: Experience and story in qualitative research*. California: Jossey-Bass.
- Clandinin, D. and Murphy, S. (2007) Looking ahead: Conversations with Elliot Mishler, Don Polkinghorne, and Amia Lieblich. *in* Clandinin, D.J. (2007). *Handbook of narrative inquiry: Mapping a methodology*. London: SAGE, pp. 632-650.
- Clark, A. (2008) *Supersizing the mind: Embodiment, action, and cognitive extension*. Buckingham: Open University Press.
- Clarke, A. (2004) *e-Learning skills*. 2<sup>nd</sup> ed. Hampshire: Palgrave Macmillan.
- Clough, P. (2002) *Narratives and fictions in educational research*. Buckingham: Open University Press.
- Coffey, A. (1999) *The ethnographic self*. London: SAGE.
- Collini, S. (2012) *What are universities for?* London: Penguin.
- Collinson, D. and Collinson, M. (2007) 'Blended leadership': Employee perspectives on effective leadership in the U.K. Further Education Sector. *Leadership*, 5(3), pp. 365-380.

Conle, C. (2010) Practice and theory of narrative inquiry in education. in Murphy, M. and Fleming, T. (eds.) (2010) *Habermas, critical theory and education*. London: Routledge, pp. 153-168.

Conole, G., Oliver, M. (2007) *Contemporary perspectives in e-learning research: Themes, methods and impact on practice*. London: Routledge.

Corbin, J. and Strauss, A. (1998) *Basics of qualitative research: Techniques and procedures for developing grounded theory*. 2<sup>nd</sup> ed. Thousand Oaks, California: SAGE.

Cornford, J. and Pollock, N. (2003) *Putting the university online: Information, technology and organizational change*. Buckingham: SRHE and Open University.

Costley, C., Elliot, G. and Gibbs, P. (2010) *Doing Work Based Research: Approaches to Enquiry for Insider-Researchers*. London: SAGE.

Cottrell, S. (2005) *Critical thinking skills: Developing effective analysis and argument*. Basingstoke: Palgrave Macmillan.

Cousin, G. (2009) *Researching learning in higher education: An introduction to contemporary methods and approaches*. London: Routledge.

Cousins, S. and Bissar, D. (2012) Adapting to the digital age: A narrative approach. *Research in Learning Technology*, **20**, pp. 1-13.

Craib, I. (1992) *Modern social theory: From Parsons to Habermas*. 2<sup>nd</sup> ed. London: Harvester Wheatsheaf.

Crawford, M., Kydd, L. and Riches, C. (1997) *Leadership and teams in educational management*. Buckingham: Open University Press.

Crespi, F. (1987) Social action and the ambivalence of communication: A critique of Habermas's theory. *European Journal of Communication*, **2**(4), pp. 415-25.

Creswell, J. (1998) *Qualitative research and research design: Choosing among the five traditions*. London: SAGE.

Creswell J. (2015). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. 5<sup>th</sup> ed. Boston, MA: Pearson.

Crossley, M. (2000) *Introducing narrative psychology: Self, trauma, and the construction of meaning*. Buckingham: Open University Press.

Crossley, N. (2004) Systematically distorted communication: Bourdieu and the socio-analysis of publics. in Crossley, N. and Roberts, J. (eds.) (2004) *After Habermas: New perspectives on the public sphere*. Oxford: Blackwell, pp. 88-112.

Crotty, M. (1998) *The foundations of social research*. London: SAGE.



Culmsee, P. and Awati, K. (2011) *The heretic's guide to best practices: The reality of managing complex problems in organisations*. Bloomington: iUniverse.

Cunningham, B. (2008) *Exploring professionalism*. London: Institute of Education, University of London.

Currie, M. (1998) *Postmodern narrative theory*. Basingstoke: Macmillan Press.

Cutcliffe J. (2003) Reconsidering reflexivity: Introducing the case for intellectual entrepreneurship. *Qualitative Health Research*, **13**(1), pp. 136-48.

Czarniawska-Joerges, B. (1998) *A narrative approach to organization studies*. London: SAGE.

Dadashzadeh, M., Saber, S. and Saber, A. (2002) *Information technology education in the new millennium*. London: IRM Press.

Dahlberg, K., Drew, N., and Nyström, M. (2001) *Reflective lifeworld research*. Lund: Studentlitteratur.

Daiute, C. (2014) *Narrative inquiry: A dynamic approach*. London: SAGE.

Daiute, C. and Lightfoot, C. (eds.) (2004) *Narrative analysis: Studying the development of individuals in society*. London: SAGE.

Danziger, J., Dutton, W., Kling, R., and Kraemer, K. (1982) *Computers and Politics: High Technology in American Local Governments*. New York: Columbia University Press.

Darder, A., Baltodano, M. and Torres, R. (2009) *The critical pedagogy reader*. 2<sup>nd</sup> ed. London: Routledge.

Davies, B. (ed.) (2005) *The essentials of school leadership*. London: Paul Chapman.

Davies, M. and Humphreys, G.W. (1993) *Consciousness: Psychological and philosophical essays*. Oxford: Blackwell.

Davies, S., Mullan, J. and Feldman, P. (2017) Rebooting learning for the digital age: What next for technology enhanced higher education? [online]. *Higher Education Policy Institute* (93). [Accessed 16 March 2018]. Available at: <[http://www.hepi.ac.uk/wp-content/uploads/2017/02/Hepi\\_Rebooting-learning-for-the-digital-age-Report-93-20\\_01\\_17Web.pdf](http://www.hepi.ac.uk/wp-content/uploads/2017/02/Hepi_Rebooting-learning-for-the-digital-age-Report-93-20_01_17Web.pdf)>.

Davis, F. (1993) User acceptance of information technology: System characteristics, user perceptions and behavioural impacts. *International Journal of Man-Machine Studies*, **38**(3), pp. 475-487.

De Ferranti, D. (2005) *Closing the gap in education and technology*. New Delhi: Manas Publications.

- Deal, T. (2005) Poetical and political leadership. *in* Davies, B. (ed.) (2005) *The essentials of school leadership*. London: Paul Chapman, pp. 133-146.
- Deem R. (2004) New managerialism, academic capitalism and entrepreneurialism. *in* Tight, M. (2004) *Higher education reader*. London: Routledge, pp. 287-302.
- DeMarrais, K. and Lapan, S. (2004) *Foundations for research: Methods of enquiry in education and the social sciences*. London: Lawrence Erlbaum.
- Denzin, N. and Lincoln, Y. (2011) *The SAGE handbook of qualitative research*. 4<sup>th</sup> ed. Thousand Oaks: SAGE.
- Denzin, N. and Lincoln, Y. (2013) Introduction: The discipline and practice of qualitative research. *in* N. Denzin and Y. Lincoln (eds.) *The landscape of qualitative research*. 4<sup>th</sup> ed. California: SAGE, pp. 1-42.
- Didion, J. (1968) *Slouching towards Bethlehem*. London: Flamingo.
- Dienstag, J. (2006) *Pessimism: Philosophy, ethic, spirit*. Princeton: University Press.
- Dinello, D. and Ebrary, I. (2005) *Technophobia! science fiction visions of posthuman technology*. Austin: University of Texas Press.
- Drake, P. and Heath, L. (2008) Insider researchers in schools and universities: The case of the professional doctorate. *in* Sikes, P. and Potts, A. (eds.) (2008) *Researching education from the inside: Investigating institutions from within*. London: Routledge, pp. 127-143.
- Duke, C. (2002) *Managing the learning university*. Buckingham: Open University Press.
- Duncan, A. and McAleese, R. (1978) *Qualified citation indexing: its relevance to education technology*. Unpublished paper, University of Aberdeen.
- Dusek, V. (2006) *Philosophy of technology: An introduction*. London: Blackwell.
- Edgar, A. and Sedgwick, P. (2002) *Cultural theory: The key thinkers*. London: Routledge.
- Edwards, G. (2017) Habermas and social movements research: Colonisation as a living battle. *in* Murphy, M. (ed.) (2017) *Habermas and social research: Between theory and method*. London: Routledge, pp. 21-37.
- Effingham, N. (2013) *An Introduction to ontology*. London: Polity.
- Eisner, E. (1991) *The enlightened eye*. New York: Macmillan.
- Elliott, J. (2005) *Using narrative in social research*. London: SAGE.

- Elliott, J. (2006) Educational research as a form of democratic rationality. *Journal of Philosophy of Education*, **40**(2), pp. 169-185.
- Elliott, J. and Sarland, C. (1995) A Study of 'Teachers as Researchers' in the Context of Award-bearing Courses and Research Degrees. *British Educational Research Journal*, **21**(3), pp. 371-386.
- Ellis, C. (2004). *The Ethnographic I*. Walnut Creek, CA: AltaMira.
- Ellis, R. and Goodyear, P. (2009) *Students' experiences of e-learning in higher education*. London: Routledge.
- Ely, D. (2008) Frameworks of educational technology. *British Journal of Educational Technology*, **39**(2), pp. 244–250.
- Emilson, A. (2017) Young children's educational practice in Swedish preschool in relation to Habermas' philosophical perspective. in Murphy, M. (ed.) (2017) *Habermas and social research: Between theory and method*. London: Routledge, pp. 156-172.
- Emmerson, P. and Frosh, S. (2004) *Critical narrative analysis in psychology: A guide to practice*. Hampshire: Palgrave Macmillan.
- English, F. (ed.) (2004) *The SAGE handbook of educational leadership: Advances in theory, research, and practice*. London: SAGE.
- Englund, T. (2010) Educational implications of the idea of deliberative democracy. in Murphy, M. and Fleming, T. (eds.) (2010) *Habermas, critical theory and education*. London: Routledge, pp. 19-32.
- Esin, C., Fathi, M. and Squire, C. (2013) Narrative Analysis: The Constructionist Approach. in Lick, U. (ed.) *The SAGE Handbook of Qualitative Data Analysis*. London: SAGE, pp. 203-216.
- Etherington, K. (2004) *Becoming a reflexive researcher: Using our selves in research*. London: Jessica Kingsley.
- Evans-Andris, M. (1995) Barrier to computer integration: Micro-interaction among computer co-ordinators and classroom teachers in elementary schools. *Journal of Research on Computing in Education*, **28**, pp. 29-45.
- Facer, K. (2011) *Learning futures: Education, technology, and social change*. London: Routledge.
- Feenberg, A. (1999) *Questioning technology*. London: Routledge.
- Feenberg, A. (2002) *Transforming technology: A critical theory revisited*. Oxford: University Press.

Finlay, L. (2002) Negotiating the swamp: The opportunity and challenge of reflexivity in research practice. *Qualitative Research*, **2**(2), pp. 209-230.

Finlayson, J. (2005) *Habermas: A very short introduction*. Oxford: University Press.

Flavin, M. and Quintero, F. (2018) UK higher education institutions' technology-enhanced learning strategies from the perspective of disruptive innovation. *Research in Learning Technology*, **26**, pp1-12.

Fleming, T. (2000). Habermas, democracy and civil society: Unearthing the social in transformative learning. in Wiessner, C., Meyer, S. and Fuller, D. (eds.) (2000) *Challenges of practice: Transformative learning in action*. New York: Columbia University, pp. 303-308.

Fleming, T. (2006) The university and democracy: Habermas, adult learning and learning society. in Kelly, T. (ed.) (2006) *What price the university?: Perspectives on the meaning and value of higher education from the National University of Ireland Maynooth*. Maynooth: NUI, pp. 81-95.

Fleming, T. (2008) We are condemned to learn. Towards higher education as a learning society. *Level 3*, **6**, pp. 1-18.

Fleming, T. (2010) Condemned to learn: Habermas, university and the learning society. in Murphy, M. and Fleming, T. (eds.) (2010) *Habermas, critical theory and education*. London: Routledge, pp. 111-124.

Floyd, A. and Arthur, L. (2010). Researching from within: Moral and ethical issues and dilemmas. *SRHE Annual Conference*. Celtic Manor Resort, Wales, 11-13 December. Available at: <<https://oro.open.ac.uk/43841/1/0108.pdf>>.

Floyd, A. and Preston, D. (2018) The role of the associate dean in UK universities: Distributed leadership in action?, *Higher Education*, **75**(5), pp. 925–943.

Flyvbjerg, B. (1998) Habermas and Foucault: Thinkers for civil society? *British Journal of Sociology*, **49**(2), pp. 210-233.

Foddy, W. (1993) *Constructing questions for interviews and questionnaires: Theory and practice in social research*. Cambridge: University Press.

Fontana, A., and Frey, J. (2005). The interview: From neutral stance to political involvement questions to negotiated text. in Denzin, N. and Lincoln, Y. (eds.) (2005) *Handbook of qualitative research*. 3<sup>rd</sup> ed. Thousand Oaks: SAGE, pp. 695–728.

Forchtner, B. (2010) Jürgen Habermas' language – philosophy and the critical study of language. *Critical Approaches to Discourse Analysis across Disciplines*, **4**(1), pp. 18-37.

Foucault, M. (1975) *Discipline and punish: The birth of the prison*. New York: Random House.

- Frampton, D. (2006) *Filmosophy*. London: Wallflower.
- Frank, A. (2000) *Notes on Habermas: Lifeworld and system* [online]. [Accessed 6 February 2017]. Available at: <<http://people.ucalgary.ca/~frank/habermas.html>>.
- Freire, P. (1985) *The politics of education: Culture, power and liberation*. London: Macmillan.
- Fu, J. (2013) ICT in education: A critical literature review and its implications. *International Journal of Education and Development using Information and Communication Technology*, **9**(1), pp. 112-125.
- Fullan, M. (1991) *The new meaning of educational change*. London: Cassell.
- Fullan, M. (2001) *Leading in a culture of change*. San Francisco: Jossey-Bass.
- Fullan, M. (2013) *Stratosphere: Integrating technology, pedagogy, and change knowledge*. Toronto: Pearson.
- Fumerton, R. and Jeske, D. *Introducing philosophy through film: Key texts, discussions, and film selections*. London: Wiley-Blackwell.
- Garnham, N. (2000) 'Information Society' as theory or ideology. *Information, Communication & Society*, **3**(2), pp. 139-52.
- Garrison, D. and Vaughan, N. (2008) *Blended learning in higher education: Framework, principles, and guidelines*. Chichester: Jossey-Bass.
- Geertz, C. (1973). *The Interpretation of Cultures*. New York: Basic Books
- Gerring, J. (2007) *Case study research: Principles and practices*. Cambridge: University Press.
- Gibbs, G. (2002) *Qualitative data analysis: Explorations with NVivo*. Buckingham: Open University Press.
- Giddens, A. (1984) *The constitution of society: Outline of the theory of structuration*. California: University of California Press.
- Giddens, A. (1998) *The third way: The renewal of social democracy*. Cambridge: Polity Press.
- Gil-Rodriguez, E. and Hefferon, K. (2013) *London IPA training manual*. To accompany workshop delivered by *London IPA Training* [26.1.13 and 27.1.13] at Megaro Hotel, St. Pancras, London WC1H 8AB.
- Gillham, W. (2000) *Developing a questionnaire*. London: Continuum.
- Giroux, H. (2011) *On critical pedagogy*. New York: Continuum.

Glaser, B. (2015) *The cry for help*. [online]. [Accessed 03 March 2018]. Available at: <<http://groundedtheoryreview.com/2015/06/19/the-cry-for-help/>>.

Glover, T. (2004) Narrative inquiry and the study of grassroots associations. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, **15**(1), pp. 47-69.

Goleman, D. (2004) What makes a leader?. *Harvard Business Review*, **82**, pp. 82–91.

Goodfellow, R. (2013) *Literacy in the digital university*. London: Routledge.

Goodman, L. (1961) Snowball sampling. *Annals of Mathematical Statistics*, **32**(1), pp. 148–170.

Gorard, S. (2003) *Quantitative methods in social sciences*. London: Continuum.

Gorard, S. (2006) *Using everyday numbers effectively in research*. London: Continuum.

Gordon, N. (2014) *Flexible pedagogies: Technology-enhanced learning* [online]. [Accessed 12 March 2018]. Available at: <[https://www.heacademy.ac.uk/system/files/resources/tel\\_report\\_0.pdf](https://www.heacademy.ac.uk/system/files/resources/tel_report_0.pdf)>.

Gough, N. (1997) *Horizons, images and experiences: The research stories collection*. Geelong, Vic: Deakin University.

Graham, C., Woodfield, W. and Harrison, J. (2013) A framework for institutional adoption and implementation of blended learning in higher education. *The Internet and Higher Education*, **18**, pp. 4-14.

Griseri, P. (1998) *Managing values: Ethical change in organisations*. London: Macmillan.

Gronn, P. (2003) *The new work of educational leaders: Changing leadership practice in an era of school reform*. London: Paul Chapman.

Gronn, P. (2010) Where to next for educational leadership?. in Bush, T. et al. (eds.) (2010) *The principles of educational leadership and management*. 2<sup>nd</sup> ed. London: SAGE, pp. 80-85.

Grumet, M. (1988) *Bitter milk: Women and teaching*. Amherst: University of Massachusetts Press.

Gunter, H. (2001) *Leaders and Leadership in Education*. London: SAGE.

Habermas, J. (1970) *Towards a rational society: Student protest, science and politics*. Massachusetts: Beacon Press.

Habermas, J. (1974) *Theory and practice*. London: Heinemann.

- Habermas, J. (1981) New social movements. *Telos*, **49**, pp. 33-27.
- Habermas, J. (1984) *The theory of communicative action. Volume 1: Reason and the rationalization of society*. London: Polity.
- Habermas, J. (1987) *The theory of communicative action. Volume 2: The critique of functionalist reason*. London: Polity.
- Habermas, J. (1989) *The structural transformation of the public sphere: An enquiry into a category of bourgeois society*. London: Polity.
- Habermas, J. (1990) *Moral consciousness and communicative action*. Cambridge: MIT Press.
- Habermas, J. (1994) Philosophy and Science as Literature? *in*. Habermas, J. (1994) *Postmetaphysical thinking: Between metaphysics and the critique of reason*. New ed. London: Polity, pp. 205-228.
- Habermas, J. (1996) *Between facts and norms*. London: Polity Press.
- Habermas, J. (1998) Toward a critique of the theory of meaning. *in*. Habermas, J. (1998) *On the pragmatics of communication*. Cambridge, Massachusetts: MIT Press, pp. 277-306.
- Hadfield, M. and Jopling, M. (2012) How might better network theories support school leadership research? *School Leadership and Management*, **32**(2), pp. 109-121.
- Hadfield, M. and Jopling, M. (2014) The development of an implementation model for ICT in education: An example of the interaction of affordances and multimodality. *Innovations in Education and Teaching International*, **51**(6), pp. 607-617.
- Hall, R. (2011) Towards a resilient strategy for technology-enhanced learning. *Campus-Wide Information Systems*, **28**(4), pp. 234-249.
- Hammersley, M. (1993) *Educational research: Current issues*. London: Paul Chapman.
- Hammersley, M. (2002) *Educational research, policymaking and practice*. London: Paul Chapman.
- Hammersley, M. (2007) *Educational research and evidence-based practice*. London: SAGE.
- Handy, C. (1977) *Understanding organizations*. London: Penguin.
- Harasim, L. (2017) *Learning theory and online technology*. London: Routledge.

- Harding, S. (ed.) (1988) *Feminism and methodology: Social science issues*. Bloomington: Indiana University Press.
- Hargreaves, A. (1994) *Changing teachers, changing times: Teachers' work and culture in the postmodern age*. London: Continuum.
- Hargreaves, A. and Fink, D. (2009) Distributed leadership: Democracy or delivery?. in Harris, A. (ed.) (2009) *Distributed leadership: Different perspectives*. Dordrecht: Springer Press, pp. 181-196.
- Harris, A. (2005) Distributed leadership. in Davis, B. (ed.) (2005) *The essentials of school leadership*. London: Paul Chapman, pp. 160-172.
- Harris, A. (ed.) (2009) *Distributed leadership: Different perspectives*. Dordrecht: Springer Press.
- Harris, A. (2010) Distributed leadership: Evidence and implications. in Bush, T. et al. (eds.) (2010) *The principles of educational leadership and management*. 2<sup>nd</sup> ed. London: SAGE, pp. 55-69.
- Hauser, G. (1999) *Vernacular voices: The rhetoric of publics and public spheres*. University of South Carolina Press.
- Hays, P. (2004) Case study research. in DeMarrais, K. B. and S. D. Lapan (2004). *Foundations for research: Methods of enquiry in education and the social sciences*. London: Lawrence Erlbaum, pp. 217-234.
- Hellawell, D. and Hancock, N. (2003) Between hierarchical control and collegiality: The academic middle manager in higher education. In Bennett, N., Crawford, M. and Cartwright, M. (eds.) (2003) *Effective educational leadership*. London: Open University in association with Paul Chapman, pp. 247-263.
- Henson, L. (1992) *The nomina theme of life: Developed biblically, theologically and contextually*. Los Angeles: Fuller Theological Seminary.
- Heron, J. and Reason, P. (2001) The practice of co-operative enquiry: Research 'with' rather than 'on' People. in Reason, P. and Bradbury, H. (2001) *Handbook of action research: Participative enquiry and practice*. London: SAGE, pp. 179-188.
- Hill, C. (2003) *Teaching using information and learning technology in further education*. Exeter: Learning Matters.
- Hodgkinson, C. (1993) Foreword. in Greenfield, T. and Ribbins, P. (eds.) (1993) *Greenfield on educational administration*. London: Routledge, pp. x-xvii.
- Hofstadter, D. and Dennett, D. (2000) *The mind's I: Fantasies and reflections on self and soul*. New York: Basic Books.
- Hogan, P. (2011) *Affective narratology: The emotional structure of stories*. Nebraska: Bison.



- Holmwood, J. (ed.) (2011) *A manifesto for the public university*. London: Bloomsbury.
- Holstein, J. (2000) *The self we live by: Narrative identity in a postmodern world*. Oxford: Oxford University Press.
- Holstein, J. and Gubrium, J. (1995) *The active interview*. London: SAGE.
- Holstein, J. and Gubrium, J. (2003) *Postmodern interviewing*. London: SAGE.
- Holstein, J. and Gubrium, J. (2009) *Analyzing narrative reality*. London: SAGE.
- Holstein, J. and Gubrium, J. (eds.) (2012) *Varieties of narrative analysis*. Los Angeles: SAGE.
- Holub, R. (1991) *Jurgen Habermas: Critic in the public sphere*. London: Routledge.
- Hopkins, D., Ainslow, M., West, M. (2001) Making sense of change. in Preedy, M., Glatter, R. and Levacic, R. (2001) *Educational management: Strategy, quality and resource*. Buckingham: Open University Press, pp. 66-78.
- How, A. (2003) *Critical theory*. London: Palgrave Macmillan.
- Howard, L. (2016) An exploration of autoethnography as an eResearch methodology to examine learning and teaching scholarship in networked learning. *The Electronic Journal of e-Learning*, **14**(5), pp. 322-335.
- Hoyle, E. and Wallace, M. (2005) *Educational leadership: Ambiguity, professionals & managerialism*. London: SAGE.
- Hussey, T. and Smith, P. (2010) *The trouble with higher education: A critical examination of our universities*. New York: Routledge.
- Hutchins, D. (1985) *Quality circles handbook*. London: Pitman publishing.
- Huws, U. (2003) *The making of a cybertariat: Virtual work in a real world*. London: Merlin.
- Huws, U. (2014) *Labor in the global digital economy: The cybertariat comes of age*. New York: Monthly Review Press.
- Idrus, F. (2015) Examining classroom transformational spaces using the third space theory in developing students' sense of shared identity. *Theory and Practice in Language Studies*, **5**(11), pp. 28-37.
- Ihde, D. (1990) *Technology and the lifeworld: From garden to earth*. Bloomington: Indiana University Press.

Imai, M. (1986) *Kaizen: The key to Japan's competitive success*. London: McGraw-Hill.

Imai, M. (1997) *Gemba kaizen: A commonsense, low-cost approach to management*. London: McGraw-Hill.

Imai, M. (2012) *Gemba kaizen: A commonsense, low-cost approach to management*. 2<sup>nd</sup> ed. London: McGraw-Hill.

Inglis, A., Ling, P. and Joosten, V. (2002) *Delivering digitally: Managing the transition to the knowledge media*. London: Kogan Page.

Inglis, D. and Thorpe, C. (2012) *An invitation to social theory*. Cambridge: Polity.

Irwin, W. and Johnson, K. (2010) *Introducing philosophy through pop culture: From Socrates to South Park, Hume to House*. Sussex: Wiley-Blackwell.

Issroff, K. Scanlon, E. (2002) Educational technology: The influence of theory. *Journal of Interactive Media in Education*, **6**, pp. 1-13.

Jack, C. and Higgins, S. (2018): What is educational technology and how is it being used to support teaching and learning in the early years? *International Journal of Early Years Education*, **26**, pp. 1-16.

Januszewski, A. and Molenda, M. (2007) *Educational technology: A definition with commentary*. London: Routledge.

Jarvie, I. (1987) *Philosophy of the film: Epistemology, ontology, aesthetics*. London: Routledge and Kegan Paul.

Jesson, J., Matheson, L. and Lacey, F.M. (2011) *Doing your literature review: Traditional and systematic techniques*. London: SAGE.

Jisc (2017) *Embedding blended learning in further education and skills* [online]. [Accessed 16 July 2018]. Available at: <<https://www.jisc.ac.uk/guides/embedding-blended-learning-in-further-education-and-skills>>.

Jochems, W., van Merriënboer, J.J.G. and Koper, R. (2003) *Integrated e-learning: Implications for pedagogy, technology and organization*. New York: RoutledgeFalmer.

Johnson-Bailey, J. (2004) Enjoining positionality and power in narrative work: Balancing contentious and modulating forces. in DeMarrais, K. and Lapan, S. (2004). *Foundations for research: Methods of enquiry in education and the social sciences*. London: Lawrence Erlbaum, pp. 123-138.

Jones, R. (2012) *Discourse analysis: A resource book for students*. London: Routledge.

- Josselson, R. (2006) Narrative research and the challenge of accumulating knowledge. *Narrative Inquiry*, **16**(1), pp. 3-10.
- Josselson, R. (2011) Narrative research: Constructing, deconstructing, and reconstructing story. in: Wertz, F., Charmaz, K., McMullen, L., Josselson, R., Anderson, R. and McSpadden, E. (2011) *Five ways of doing qualitative analysis*. London: The Guildford Press, pp. 224-242.
- Kamberelis, G. and Dimitriadis, G. (2013) *Focus groups: From structured interviews to collective conversations*. London: Routledge.
- Kanuka, H. and Rourke, L. (2008) Exploring amplifications and reductions associated with e-learning: conversations with leaders of e-learning programs. *Technology, Pedagogy and Education*, **17**(1), pp. 5-15.
- Kaplan, D. (ed.) (2009) *Readings in the philosophy of technology*. 2<sup>nd</sup> ed. Plymouth: Rowman and Littlefield.
- Kennedy, P. (2017) Habermas and the self-regulation of complementary and alternative medicine (CAM) in Murphy, M. (ed.) (2017) *Habermas and social research: Between theory and method*. London: Routledge, pp. 56-72.
- Khan, M. (2009) A critical assessment of education by applying Habermas, *Roundhouse*, **1**(1), pp. 1-6. [Accessed 25 April 2018]. Available at: <<http://roundhouse.leeds.ac.uk/autumn-2009-edition/khan/>>.
- Kim, J. (2015) *Understanding narrative inquiry*. London: SAGE.
- Kinshuk, H., Sampson, D. and Chen, N. (2013) Trends in educational technology through the lens of the highly cited articles published in the Journal of Educational Technology and Society. *Journal of Educational Technology and Society*, **16**(2), pp. 3-20.
- Knibb, J. (2013) Private lives, public property: Narrating the lives of mothers who have children with special needs. in Trahar, S (ed.) (2013) *Contextualising narrative inquiry: Developing methodological approaches for local context*. London: Routledge, pp. 20-42.
- Kobayashi, I. (1990) *20 Keys to workplace improvement*. Cambridge: Productivity Press.
- Kramp, M. (2004) Exploring life and experience through narrative inquiry. in DeMarrais, K. and Lapan, S. (2004). *Foundations for research: Methods of enquiry in education and the social sciences*. London: Lawrence Erlbaum, pp. 103-121.
- Krey, P. (2004) *Jürgen Habermas: The life-world and the two systems*. [Accessed 23 February 2018]. Available at: <[http://www.scholarclarity.com/?page\\_id=807](http://www.scholarclarity.com/?page_id=807)>.

Krigsman, M. (2014) *Higher education: Innovation and digital transformation* [online]. [Accessed 10 April 2018]. ZNET. Available at: <<https://www.zdnet.com/article/higher-education-innovation-and-digital-transformation/>>.

Kukulska-Hulme, A. and Traxler, J. (2013) Design Principles for Mobile Learning. in Beetham, H. and Sharpe, R. (2013) *Rethinking pedagogy for a digital age: Designing for 21<sup>st</sup> century learning*. 2<sup>nd</sup> ed. London: Routledge, pp. 244-257.

Kurt, S. (2016) *Definitions of Educational Technology* [online]. [Accessed 9 Dec 2018]. Educational Technology. Available at: <<https://educationaltechnology.net/definitions-educational-technology/>>.

Kydd, L., Anderson, L., Newton, W. and Open University (2003) *Leading people and teams in education*. London: Open University in association with Paul Chapman.

Laclau, E. and Mouffe, C. (1985) *Hegemony and socialist strategy*. London: Verso.

Lambert, L., Walker, D., Zimmerman, D. Cooper, J., Lambert, M., Gardner, M. and Szabo, M. (2002) *The Constructivist Leader*. London: Teachers College Press.

Larkin, M., Watts, S. and Clifton, E. (2006) Giving voice and making sense in interpretative phenomenological analysis. *Qualitative Research in Psychology*, **3**(2), pp. 102-120.

Lashway, L. (2003) Distributed leadership. *Research Roundup*, **19**(4), pp. 1-2.

Latif, F. (2017) TELFest: An approach to encouraging the adoption of educational technologies. *Research in Learning Technology*, **25**, pp. 1-14.

Laurillard, D. (2008) *Digital technologies and their role in achieving our ambitions for education*. London: University of London, Institute of Education.

Levidow, L. (2002). Marketizing higher education: Neoliberal strategies and counter-strategies. in Robins, K. and Webster, F. (eds.) (2002) *The virtual university? Knowledge, markets and management*. Oxford: University Press, pp. 227–248.

Lewis, K. (1995) *Kaizen: The right approach to continuous improvement*. Bedford: IFS International Ltd.

Lincoln, Y. and Guba, E. (1985) *Naturalistic enquiry*. London: SAGE.

Lines, R. (2007) Using power to install strategy: The relationship between expert power, positional power, influence tactics and implementation success. *Journal of Change Management*, **7**(2), pp. 143-170.

Locke, J. and Woosley, A. (1964) *An essay concerning human understanding*. London: Fontana.

Loveless, A. and Williamson, B. (2013) *Learning identities in a digital age: Rethinking creativity, education and technology*. London: Routledge.

Luckin, R. (ed.) (2018) *Enhancing learning and teaching with technology: What the research says*. London: Institute of Education Press.

Luft, S. (2011) *Subjectivity and lifeworld in transcendental phenomenology*. London: Northwestern University Press.

Luke, T. (2002) Digital discourses, online classes, electronic documents: Developing new university technocultures. in Robins, K. and Webster, F. (eds.) (2002) *The virtual university?: Knowledges, markets, and management*. Oxford: University Press, pp. 249-281.

Luttrell, W. (2010) *Qualitative educational research: Readings in reflexive methodology and transformative practice*. New York: Routledge.

Lynch, K., Grummell, B., Devine, D. (2012) *New managerialism in education: Commercialization, carelessness and gender*. London: Palgrave.

Lynch, K. (2014) 'New managerialism' in education: *The organisational form of neoliberalism* [online]. [accessed 02 February 2018]. Available at: <<https://www.opendemocracy.net/kathleen-lynch/%27new-managerialism%27-in-education-organisational-form-of-neoliberalism>>.

Mabert, L., Walker, D., Zimmerman, D., Cooper, J., Lambert, M., Gardner, M. and Szabo, M. (2002) *The constructivist leader*. 2<sup>nd</sup> ed. London: Teachers College Press.

MacBeath, J., Oduro, G., and Waterhouse, J. (2004) *Distributed leadership in action: A study of current practice in schools*. Nottingham: National College for School Leadership.

MacKenzie, D. and Wajcman, J. (eds.) (1999) *The social shaping of technology*. Buckingham: Open University Press.

MacLagan, P. (1998) *Management and morality*. London: SAGE.

Maier, P. (2000) *Integrating technology in learning and teaching*. London: Kogan Page.

Mama, M. and Hennessy, S. (2010). Level of technology integration by primary teachers in Cyprus and student engagement. *Technology, Pedagogy and Education*, **19**(2), pp. 269-275.

Marcuse, H. (1941) Some social implications of modern technology. in Arato, A. and Gebhart, E. (eds.) (1982) *The essential Frankfurt school reader*. New York: Continuum International Publishing Group, pp. 138-162.

Marcuse, H. (1964) *One-dimensional man: Studies in the ideology of advanced industrial society*. London: Routledge and Kegan Paul.

- Martin, E. (1999) *Changing academic work: Developing the learning university*. Buckingham: Open University Press.
- Martin, J. and Norman, A. (1970) *The computerized society. An appraisal of the impact of computers on society over the next fifteen years*. Englewood Cliffs, N.J.: Prentice-Hall.
- Mason, J. (2002) *Qualitative researching*. 2<sup>nd</sup> ed. London: SAGE.
- Mastenbroek, W. (1993) *Conflict management and organization development*. Expanded ed. Chichester: John Wiley.
- Masterman, L. (2013) The challenge of teachers' design practice. in Beetham, H. and Sharpe, R. (2013) *Rethinking pedagogy for a digital age: Designing for 21<sup>st</sup> century learning*. 2<sup>nd</sup> ed. London: Routledge, pp. 64-77.
- Mayer, R. (ed.) (2005) *The Cambridge handbook of multimedia learning*. Cambridge University Press.
- Maynes, M., Pierce, J. and Laslett, B. (2008) *Telling stories: The use of personal narratives in the social sciences and history*. Cornell: University Press.
- McAdams, D. (1997) *The stories we live by: Personal myths and the making of the self*. London: Guilford Press.
- McCormack, C. (2004) Storying stories: A narrative approach to in-depth interview conversations. *International Journal of Social Research Methodology*, 7(3), pp. 219-236.
- McCoy, B. (2007) *Living into leadership: A journey in ethics*. California: Sanford Business Books.
- McDougall, A. (ed.) (2010) *Researching IT in education*. London: Routledge.
- McEwan, H. (1995) *Narrative in teaching, learning, and research*. New York: Teachers College Press.
- McEwan, T. (2001) *Managing values and beliefs in organisations*. Essex: Pearson.
- McFarlane, B. (1996) *Novel to film: An introduction to the theory of adaptation*. Oxford: University Press.
- McKean, P. (2017) *The future of FE: Our vision for the next five years* [online]. [Accessed 16 March 2018]. Available at <<https://www.jisc.ac.uk/blog/the-future-of-fe-our-vision-for-the-next-five-years-11-oct-2017>>.
- McLean, M. (2006) *Pedagogy and the university*. London: Continuum.
- McNaught, C. (2006) Integrating teaching and learning principles with IT infrastructure and policy. in Ashwin, Paul (ed.) (2006) *Changing higher education*:

*The development of learning and teaching (SEDA Series)*. London: Routledge, pp. 108-128.

McNay, I. (1995) From the collegial academy to corporate enterprise. in Schuller, T. (ed.) (1995) *The changing university?* Buckingham: Open University Press, pp. 105-115.

Mercer, J. (2007) The challenges of insider research in educational institutions: Wielding a double-edged sword and resolving delicate dilemmas. *Oxford Review of Education*, **33**(1), pp. 1-17.

Miller, J., Wroblewski, M. and Villafuerte, J. (2013) *Creating a kaizen culture: Align the organization, achieve breakthrough results, and sustain the gains*. London: McGraw-Hill.

Mishler, E. (1999) *Research interviewing: Context and narrative*. Harvard: University Press.

Miyoshi, M. The university in the 'global' economy. in Robins, K. and Webster, F. (eds.) (2002) *The virtual university?: Knowledges, markets, and management*. Oxford: University Press, pp. 49-83.

Molesworth, M., Scullion, R. and Nixon, E. (eds.) (2010) *The marketisation of higher education and the student as consumer*. London: Routledge.

Moon, J. (2010) *Using story: In higher education and professional development*. London: Routledge.

Mouffe, C. (2000) Deliberative democracy or agonistic pluralism? *Social Research*, **66**(3), pp. 745-758.

Mouffe, C. (2005) *The democratic paradox*. London: Verso.

Muijs, D. (2004) *Doing quantitative research in education with SPSS*. London: SAGE.

Mumtaz, S. (2000) Factors affecting teachers' use of information and communications technology: A review of the literature. *Journal of Information Technology for Teacher Education*, **9**(3), pp. 319-342.

Murphy, M. (2010). 'Forms of rationality and public sector reform: Habermas, education and social Policy. in Murphy, M. and Fleming, T. (eds.) (2010) *Habermas, critical theory and education*. London: Routledge, pp. 78-93.

Murphy, M. and Fleming, T. (eds.) (2010) *Habermas, critical theory and education*. London: Routledge.

Murphy, M. (2013) *Social Theory and Education Research*. London: Routledge.

- Murphy, M. (ed.) (2017) *Habermas and social research: Between theory and method*. London: Routledge.
- Murphy, M. and Costa, C. (2018) *Social Theory Applied* [online]. [Accessed 20 August 2018]. Available at: <<https://socialtheoryapplied.com/>>.
- Nagel, T. (1987) *What does it all mean?: A very short introduction to philosophy*. Oxford: University Press.
- Nelson, K. (2015). *Kaizen for small business: How to gain and maintain a competitive edge by applying the Japanese philosophy of kaizen to your small business* [Kindle version]. Miafn LLC. Available at: <<https://www.amazon.co.uk/Kaizen-Small-Business-Competitive-Philosophy-ebook/dp/B0101EV0TY/>>. [Accessed 3 April 2018].
- Newby, T., Stepich, D., Lehman, J., Russell, J., Ottenbreit-Leftwish, A. (2011) *Educational technology for teaching and learning*. 4<sup>th</sup> ed. London: Pearson.
- Newman, J. (ed.) (2005) *Remaking governance: People, politics and the public sphere*. Bristol: Policy Press.
- Newman, T. and Beetham, H. (2017) *Student digital experience tracker 2017: The voice of 22,000 UK learners* [online]. Jisc. [Accessed 4 May 2018]. Available at: <<http://repository.jisc.ac.uk/6662/1/Jiscdigitalstudenttracker2017.pdf>>.
- Newman, J. and Clarke, J. (1994) Going about our business? The managerialism of public services. in J. Clarke, A. Cochrane and E. McLaughlin (eds.) (1994) *Managing social policy*. London: SAGE, pp. 13-31.
- Njenga, J. and Fourie, L. (2010) The Myths about e-learning in higher education. *British Journal of Educational Technology*, **41**(2), pp. 199-212.
- Noble, D. (2002) *Digital diploma mills*. New York: Monthly Review Press.
- Nortvig, A., Petersen, A., and Balle, S. (2018) A literature review of the factors influencing eLearning and blended learning in relation to learning outcome, student satisfaction and engagement. *The Electronic Journal of e-Learning*, **16**(1), pp. 46-55.
- Nussbaum, M. (2010) *Not for profit: Why democracy needs the humanities*. Princeton: University Press.
- O'Brien, D. *An Introduction to the theory of knowledge*. Cambridge: Polity Press.
- O'Donoghue, J. (2006) *Technology supported learning and teaching: A staff perspective*. Hershey, PA: Information Science Publishing.
- O'Donoghue, T. and Punch, K. (2003) *Qualitative educational research in action: Doing and reflecting*. London: Routledge/Falmer.



- Oliver, R., Harper, B., Wills, S., Agostinho, S. and Hedberg, J. (2013) Describing ICT-based learning designs that promote quality learning outcomes. *in* Beetham, H. and Sharpe, R. (2013) *Rethinking pedagogy for a digital age: designing for 21<sup>st</sup> century learning*. 2<sup>nd</sup> ed. London: Routledge, pp. 102-118.
- Ongstad, S. (2010) The concept of lifeworld and education in post-modernity. *in* Murphy, M. and Fleming, T. (eds.) (2010) *Habermas, critical theory and education*. London: Routledge, pp. 47-62.
- Oppenheim, A. (1992) *Questionnaire design, interviewing and attitude measurement*. London: Pinter Publishers.
- Outhwaite, W. (1994) *Habermas: A critical introduction*. Cambridge: Polity Press.
- Outhwaite, W. (1996) *The Habermas reader*. Oxford: Polity.
- Pachler, N. (2011) *Key issues in e-learning: Research and practice*. London: Continuum.
- Pahl, K. and Rowsell, J. (2005) *Literacy and education: Understanding the new literacy studies in the classroom*. London: SAGE.
- Paltridge, B. (2006) *Discourse analysis: an introduction*. London: Continuum.
- Papacharissi, Z. (2002) The virtual sphere: The internet as a public sphere. *New Media and Society*, **4**(1), pp. 9-27.
- Parsons, T. (1968) *The structure of social action: A study in social theory with special reference to a group of recent European writers*. New York: Free Press of Glencoe.
- Patching, D. (1990) *Practical soft systems analysis*. London: Pitman Publishing.
- Pates, D. and Sumner, N. (2016) E-learning spaces and the digital university. *International Journal of Information and Learning Technology*, **33**(3), pp. 159-171.
- Petrov, G., Bolden, R., Gosling, J. (2008) *Developing collective leadership in higher education: Final report*. London: Leadership Foundation for Higher Education.
- Pinch, T. and Bijker, W. (1984) The social construction of facts and artefacts: Or how the sociology of science and the sociology of technology might benefit each other. *Social Studies of Science*, **14**(3), pp. 399-441.
- Pinch, T. and Bijker, W. (1986) Science, relativism and the new sociology of technology: Reply to Russell. *Social Studies of Science*, **16**(2), pp. 347-360.
- Polkinghorne, D. (1995) Narrative configuration in qualitative analysis. *International Journal of Qualitative Studies in Education*, **8**(1), pp. 5-23.

- Pollitt, C. (1995) Justification by works or by faith? Evaluating the new public management. *Evaluation*, **1**, pp. 133-154.
- Popovich, I. (1997) *Kaizen and you: Achieving success through self-knowledge and personal improvement*. Guildford: Management Books 2000 Ltd.
- Powell, J. and Lee, J. (1998) *Postmodernism for beginners*. London: Writers and Readers.
- Preedy, M., Glatter, R. and Levacic, R. (eds.) (1997) *Educational management: Strategy, quality and resources*. Buckingham: Open University Press.
- Preston, D. and Price, D. (2012). 'I see it as a phase: I don't see it as the future': academics as managers in a UK university. *Journal of Higher Education Policy and Management*, **34**(4), pp. 409–419.
- Preston, D. and Floyd, A. (2016) Supporting the Role of Associate Dean in Universities: an Alternative Approach to Management Development. *Higher Education Quarterly*. **70**(3), pp. 264-280.
- Pring, R. (1999). Reflecting on the reflective practitioners. in Ai-Yen Chen & John van Maanen (eds.) (1999) *The reflective spin: Case studies of teachers in higher education transforming action*. Singapore: World Scientific Publishing, pp. 3-13.
- Pusey, M. (1987) *Jürgen Habermas*. London: Routledge.
- Rajasingham, L. and Tiffin, J. (2003) *The global virtual university*. London: Routledge.
- Ramsden, P. (1992). *Learning to teach in higher education*. London: Routledge.
- Randle, K. and Brady, N. (1997) Further education and the new managerialism. *Journal of Further and Higher Education*, **21**(2), pp. 229-239.
- Raulston, C. and Wright, V. (2010) Teachers' perceptions and attitudes of one teacher laptop initiative: Connections toward 21st century learning. *Meridian Middle School Computer Technologies Journal*, **13**(1), pp. 1-21.
- Reason, P. and Bradbury, H. (2001) *Handbook of action research: Participative enquiry and practice*. London: SAGE.
- Redmond, B. (2006) *Reflection in action: Developing reflective practice in health and social services*. New ed. Aldershot: Ashgate.
- Reed, M. and Deem, R. (2002) New managerialism: The manager-academic and technologies of management in universities – looking forward to virtuality?' in Robins, K. and F. Webster (eds.) (2002). *The virtual university?: Knowledges, markets, and management*. Oxford: University Press, pp. 126-147.
- Reeves, T. and Oh, G. (2017) The goals and methods of educational technology

research over a quarter century (1989–2014). *Education Technology Research and Development*, **65**, pp. 325-339.

Reiser, R. and Dempsey, J. (eds.) *Trends and issues in instructional design and technology*. 2<sup>nd</sup> ed. New Jersey: Pearson.

Reynolds, D., Treharne, D and Tripp, H. (2003) ICT – the hopes and the reality. *British Journal of Educational Technology*, **34**(2), pp. 151-167.

Riessman, C. (1993) *Narrative analysis*. London: SAGE.

Riessman, C. (2008) *Narrative methods for the human sciences*. London: SAGE.

Roberts, J. (2003) *The aesthetics of free speech: Rethinking the public sphere*. London: Palgrave Macmillan.

Robertson, S. I., Calder, J., Fung, P., Jones, A., O'Shea, T. and Lambrechts, G. (1996) Pupils, Teachers and Palmtop Computers. *Journal of Computer Assisted Learning*, **12**(4), pp. 194-204.

Robins, K. and Webster, F. (eds.) (2002) *The virtual university?: Knowledges, markets, and management*. Oxford: University Press.

Robson, C. (2002) *Real world research: A resource for social scientists and practitioner-researchers*. 2<sup>nd</sup> ed. Oxford: Blackwell Publishers.

Robson, M. (1988) *Quality circles: A practical guide*. 2<sup>nd</sup> ed. Aldershot: Gower Publishing.

Rogers, E. (1995) *Diffusion of innovations*. 4<sup>th</sup> ed. London: Free Press.

Rogers, G. (1994) *Locke's philosophy: Content and context*. Oxford: Clarendon Press.

Roller, M. (2016) *Qualitative research design: Selected articles from research design review published in 2015* [online]. [Accessed 1 March 18]. Available At: <<http://www.rollerresearch.com/MRR%20WORKING%20PAPERS/Qualitative%20Research%20Design-2015.pdf>>.

Roller, M. and Lavrakas, P. (2015) *Applied qualitative research design: A total quality framework approach*. New York: Guildford Press.

Rosenau, P. (1992) *Post-modernism and the social sciences: Insights, inroads, and intrusions*. Oxford: Princeton University Press.

Roushan, G., Holley, D., and Biggins, D. (2016) The kaleidoscope of voices: An action research approach to informing institutional e-learning policy. *The Electronic Journal of e-Learning*, **14**(5), pp. 293-300.

- Rugg, G., Petre, M. and Ebrary, I. (2007) *A gentle guide to research methods*. Maidenhead: Open University Press.
- Russell, S. (1986) The social construction of artefacts: Response to Pinch and Bijker. *Social Studies of Science*, **16**, pp. 331-346.
- Ryan, S., Scott, B., Freeman, H. and Patel, D. (2000) *The virtual university: The Internet and resource-based learning*. London: Kogan Page.
- Saldana, J. (2013) *The coding manual for qualitative researchers*. 2<sup>nd</sup> ed. London: SAGE.
- Salisbury, D. (1996) *Five technologies for educational change*. New Jersey: Educational Technology Publications.
- Salmon, G. (2000) *E-Moderating*. London: Routledge.
- Salmon, G. (2013) *E-tivities*. London: Routledge.
- Sarsa, J, and Escudero, T., (2016) A roadmap to cope with common problems in e-learning research designs. *The Electronic Journal of e-Learning*. **14**(5), pp. 336-349.
- Savin-Baden, M. (2000) *Problem-based learning in higher education: Untold stories*. Buckingham: SRHE and Open University Press.
- Savin-Baden, M. (2004) *Foundations of problem-based Learning*. Berkshire: Open University Press.
- Savin-Baden, M. (2008) *Learning spaces: Creating opportunities for knowledge creation in academic life*. Berkshire: SRHE and Open University Press.
- Savin-Baden, M. and Major, C. (2010) *New approaches to qualitative research: Wisdom and uncertainty*. London: Routledge.
- Savin-Baden, M. and Major, C. (2013) *Qualitative research: The essential guide to theory and practice*. London: Routledge.
- Schon, D. (1991) *The reflective practitioner: How professionals think in action*. London: Routledge.
- Schostak, J. (2002) *Understanding, designing, and conducting qualitative research in education: Framing the project*. Buckingham: Open University Press.
- Schuller, T. (ed.) (1995) *The changing university?* Buckingham: SRHE and Open University Press.
- Scotchmer, A. (2007) *5S Kaizen in 90 Minutes*. Oxford: Management Books 2000 Ltd.

- Scott, D. and Usher, R. (1996) *Understanding educational research*. London: Routledge.
- Seels, B. and Richey, R. (1994) *Instructional technology: The definition and domains of the field*. Washington, DC: Association for Educational Communications and Technology.
- Selwyn, N. (2002) *Telling Tales on Technology: Qualitative Studies of Technology and Education*. Hampshire: Ashgate Publishing Ltd.
- Selwyn, N. (2007) The use of computer technology in university teaching and learning: A critical perspective. *Journal of Computer Assisted Learning*, **23**(2), pp. 83-94.
- Selwyn, N. (2008) Realising the potential of new technology? Assessing the legacy of New Labour's I.C.T. agenda 1997-2007. *Oxford Review of Education*, **34**(6), pp. 701-712.
- Selwyn, N. (2010) Degrees of digital division: Reconsidering digital inequalities and contemporary higher education. *Revista de Universidad y Sociedad del Conocimiento*, **7**(1), pp. 28-37.
- Selwyn, N. (2010) Looking beyond learning: Notes towards the critical study of educational technology. *Journal of Computer Assisted Learning*, **26**(1), pp. 65-73.
- Selwyn, N. and Husen, O. (2010) The educational benefits of technological competence: An investigation of students' perceptions. *Evaluation and Research in Education*, **23**(2), pp. 137-141.
- Selwyn, N. (2011) *Education and technology: Key issues and debates*. London: Continuum.
- Selwyn, N. (2013) *Distrusting educational technology*. London: Routledge.
- Selwyn, N. (2016) Minding our language: Why education and technology is full of bullshit ... and what might be done about it. *Learning, Media and Technology*, **41**(3), pp. 437-443.
- Selwyn, N. (2017) *Is technology good for education?* Cambridge: Polity Press.
- Sembi, P. (2012) Implementing change: An autobiographical case study of introducing a technology innovation within a West Midlands HEI. *Journal of Further and Higher Education*, **36**(1), pp. 109-125.
- Senge, P., Kleiner, A., Roberts, C., Ross, R. and Smith, B. (1994) *The Fifth Discipline Fieldbook: Strategies and Tools for Building a Learning Organization*. London: Nicholas Brealey Publishing.
- Senge, P., Scharmer, C., Jawroski, J. and Flowers, B. (2005) *Presence: Exploring profound change in people, organisations and society*. London: Nicholas Brealey.

Shabani, O. (2010) *Critical theory* [online]. [Accessed 23 February 2018]. Available at: <<https://philosophy.wordpress.com/2010/04/17/critical-theory/>>.

Shaw, P. (2002) *Changing conversations in organizations: A complexity approach to change*. London: Routledge.

Shepherd, S. (2017) There's a gulf between academics and university management – and it's growing. *The Guardian* [online]. 27 July. [Accessed 4 May 2018]. Available at: <<https://www.theguardian.com/higher-education-network/2017/jul/27/theres-a-gulf-between-academics-and-university-management-and-its-growing>>.

Shirley, D. (2011) The fourth way of technology and change. *Journal of Educational Change*, **12**, pp. 187-209.

Shulman, L. (1981) Disciplines of enquiry in education: An overview. *Educational Researcher*, **10**(6), pp. 5-12, 23.

Shurville, S., Browne, T., Whitaker, M. (2010) An appetite for creative destruction: Should the role of senior academic technology officer be modeled on a CIO or a CTO? *Campus-Wide Information Systems*, **27**(3), pp. 137-147.

Silverman, D. (2006) *Interpreting qualitative data: Methods for analysing talk, text and interaction*. 2<sup>nd</sup> ed. London: SAGE.

Simons, H. (1980) *Towards a science of the singular: Essays about case study in educational research and evaluation*. Norwich: Centre for Applied Research in Education, University of East Anglia.

Sipilä, K. (2010) The impact of laptop provision on teacher attitudes towards ICT. *Technology, Pedagogy and Education*, **19**(1), pp. 3-16.

Sismondo, S. (1993) Some social constructions. *Social Studies of Science*, **23**, pp. 515-553.

Slaughter, S. and Rhoades, G. (2009) *Academic capitalism and the new economy: Markets, state, and higher education*. Baltimore: Johns Hopkins University Press.

Sloan, T. (1999) The colonization of the lifeworld and the destruction of meaning. *Radical Psychology*, **1**(2), pp. 1-6.

Smith, S. (2011) Afterword: A positive future for higher education in England. in: Holmwood, J. (ed.) (2011) *A manifesto for the public university*. London: Bloomsbury, pp. 127-142.

Smith, J., Flowers, P. and Larkin, M. (2009) *Interpretative phenomenological analysis: Theory, method and research*. London: SAGE.

Smyth, J. (1989) *Critical perspective on educational leadership*. London: Routledge.

- Smyth, A. and Holian, R. (2008) Credibility issues in research from within organisations. *in*. Sikes, P and Potts, A. (eds.) *Researching education from the inside*. New York: Routledge, pp. 33-47.
- Spector, J., Merrill, D. Merrienboer, J., Driscoll, M. (2008) *Handbook of research on educational communications and technology*. 3<sup>rd</sup> ed. New York: Lawrence Erlbaum Associates.
- Spector, J. (2011) *Foundations of educational technology: Integrative approaches and interdisciplinary perspectives*. London: Routledge.
- Spector, J. (2016) *Foundations of educational technology: Integrative approaches and interdisciplinary perspectives*. 2<sup>nd</sup> ed. London: Routledge.
- Spector, J. (2017) Reflections on educational technology research and development. *Education Technology Research and Development*, **65**, pp. 1415–1423.
- Spector-Mersel, G. (2010) Narrative research: Time for a paradigm. *Narrative Inquiry*, **20**(1), pp. 204-224.
- Speedy, J. (2008) *Narrative inquiry and psychotherapy*. London: Palgrave Macmillan.
- Squire, C., Davis, M., Esin, C., Andrews, M., Harrison, B., Hyden, L and Hyden, M. (2014) *What is Narrative Research?* London: Bloomsbury.
- Stake, R. (1994) Case studies. *in* Denzin, N. and Lincoln, Y. (1994) *Handbook of qualitative research*. London: SAGE.
- Stake, R. (1995) *The art of case study research*. London: SAGE.
- Stephenson, J. (ed.) (2001) *Teaching and learning online: Pedagogies for new technologies*. London: RoutledgeFalmer.
- Stockman, C. (2016) Empirical data and emerging power critiques: Lessons learned. *The Electronic Journal of e-learning*, **14**(5), pp. 312-321.
- Tannenbaum, R., Weschler, I. and Massarik, F. (1987) *Leadership and Organization: A Behavioral Science Approach*. London: Garland Publishing.
- Teichman, J. and Evans, K. (1999) *Philosophy: A beginner's guide*. 3<sup>rd</sup> ed. Malden, Massachusetts: Blackwell Publishers.
- Thomassen, L. (ed.) (2006) *The Derrida-Habermas reader*. Edinburgh: University Press.
- Thomson, P. (2013) Coming to terms with voice. *in* Wise, C., Bradshaw, P., Cartwright, M. and Open University (2013) *Leading professional practice in education*. London: SAGE, pp. 78-88.

Tight, M. (2012) *Researching higher education*. 2<sup>nd</sup> ed. Maidenhead: Open University Press.

Tight, M. (2017) *Understanding Case Study Research*. London: SAGE.

Trahar, S. (2009) Beyond the story itself: Narrative inquiry and autoethnography in intercultural research in higher education. *Forum: Qualitative Social Research*. **10**(1), pp. 1-13. [Accessed 5 May 2018]. Available at: <<http://www.qualitative-research.net/index.php/fqs/article/view/1218/2653>>

Trahar, S. (2011) *Developing cultural capability in international higher education*. London: Routledge.

Trahar, S. (ed.) (2013) *Contextualising narrative inquiry: Developing methodological approaches for local context*. London: Routledge.

Traxler, J. (2009) Learning in a mobile age. *International Journal of Mobile and Blended Learning*, **1**(1), pp. 1-12.

Traxler, J. (2010) Students and mobile devices. *Research in Learning Technology*, **18**(2), pp. 149-60.

Traxler, J. and Kukulska-Hulme, A. (eds.) (2016) *Mobile learning: The next generation*. London: Routledge.

Trowler, P. (1998) *Academics responding to change: New higher education frameworks and academic cultures*. Buckingham: SRHE and Open University Press.

Tshabalala, M., Ndeya-Ndereya, C. and Merwe, T. van der (2014) Implementing blended learning at a developing university: Obstacles in the way. *The Electronic Journal of e-Learning*, **12**(1), pp. 101-110.

Tymieniecka, A. (2012) *Phenomenology and the Human Positioning in the Cosmos: The Life-world, Nature, Earth, Book Two*. London: Springer.

Usher, R. (1996) Neglected epistemological assumptions. in Scott, D. and Usher, R. (1996) *Understanding educational research*. London: Routledge, pp. 9-32.

Van Manen, M. (1995) On the epistemology of reflective practice. *Teachers and Teaching: Theory and practice*, **1**(1), pp. 33-50.

Van Manen, M. (1997) *Researching lived experience: Human science for an action sensitive pedagogy*. 2<sup>nd</sup> ed. State University of New York Press.

Van Niekerk, L. and Savin-Baden, M. (2010) 'Relocating truths in the qualitative research paradigm'. in Savin-Baden, M. and Major, C. H. (2010) *New Approaches to Qualitative Research: Wisdom and Uncertainty*. London & New York: Routledge, pp. 28-36.



- Varaki, B. (2007). Narrative inquiry in educational research. *Forum: Qualitative Social Research* [online], **8**(1), pp. 1-7. [Accessed 16 June 2015]. Available at: <<http://www.qualitative-research.net/fqs-texte/1-07/07-1-4-e.htm>>.
- Volti, R. (1992) *Society and technological change*. 2<sup>nd</sup> ed. Derbyshire: Worth Publishers.
- Wallace, M. (2001) Sharing leadership of schools through teamwork: A justifiable risk? *Educational Management and Administration*, **29**(2), pp. 153-167.
- Walsh, P. (2006) Narrowed horizons and the impoverishment of educational discourse: Teaching, learning and performing under the new educational bureaucracies. *Journal of Education Policy*, **21**(1), pp. 95-117.
- Warner, D. and Palfreyman, D. (eds.) (1996) *Higher education management: The key elements*. Buckingham: SRHE and Open University Press.
- Warschauer, M. (2004) *Technology and social inclusion*. London: MIT Press.
- Webster, F. (1995) *Theories of the information society*. London: Routledge.
- Webster, L. and Mertova, P. (2007) *Using Narrative Inquiry as a research method: An introduction to using critical event narrative analysis in research on learning and teaching*. London: Routledge.
- Weller, M. (2007) *Virtual learning environments: Using, choosing and developing your VLE*. London: Routledge.
- Wellington, J. (2000) *Educational research: Contemporary issues and practical approaches*. London: Continuum.
- Wells, K. (2011) *Narrative inquiry*. Oxford University Press.
- Wenger, E. (2000) *Communities of practice: Learning, meaning, and identity*. Cambridge: University Press.
- Wertz, F., Charmaz, K., McMullen, L., Josselson, R., Anderson, R. and McSpadden, E. (2011) *Five ways of doing qualitative analysis*. London: The Guildford Press.
- White, D. (2014) *What do students entering HE expect from digital technologies?* [online]. [Accessed 5 April 208]. Available at: <<https://www.jisc.ac.uk/blog/what-do-students-entering-he-expect-from-digital-technologies-01-sep-2014>>.
- White, J. (1989) *Introduction to philosophy*. Belmont, CA: Wadsworth Publishing Co.
- White, S. (1998) *The recent work of Jürgen Habermas: Reason, justice and modernity*. Cambridge: University Press.
- Whitney, D., Trosten-Bloom, A., and Rader, K. (2010) *Appreciative leadership*. London: McGraw-Hill.

Wise, C., Bradshaw, P., Cartwright, M. and Open University (2013) *Leading professional practice in education*. London: SAGE.

Woelders, S. and Abma, T. (2017) Looking at participation through the lens of Habermas' theory: opportunities to bridge the gap between lifeworld and system?. in Murphy, M. (ed.) (2017) *Habermas and social research: Between theory and method*. London: Routledge, pp. 122-138.

Yin, R. (ed.) (2004) *The case study anthology*. London: SAGE.

Yin, R. (2018) *Case Study Research and Applications: Design and Methods*. 6<sup>th</sup> ed. London: SAGE.

Yolton, J. (1985) *Locke: An introduction*. Oxford: Blackwell.

Younie, S. and Bradshaw, P. (2018) *Debates in computing and ICT education*. London: Routledge.

Zeichner, K. (1995) Beyond the divide of teacher research and academic research. *Teachers and teaching: Theory and practice*, 1(2), pp. 153-172.

## Appendices

A – Research questions.....	204
B – Pilot questionnaire findings.....	205
C – Participants.....	214
D – Interview questions.....	219
E – Interview prompts.....	222
F – Coding and analysis.....	228
G – Ethical approval.....	230
H – Participant consent form.....	234

## **Academic perceptions of Educational Technology: towards communicative rationality in the HEI**

### **RQ1: How has the role of Educational Technology developed in the post-1992 HEI?**

- a. What are the main drivers and trends for Ed Tech use in the HEI?
- b. What forms of Ed Tech implementation are available to the HEI?
- c. What other ways are there for leading on Ed Tech change?

### **RQ2: How do academics articulate their perceptions of Educational Technology implementation in the post-1992 HEI?**

- a. What are the academic experiences of educational technology in the HEI?
- b. How do academics position themselves in relation to these experiences?
- c. How has this impacted upon their implementation and use of Ed Tech?

### **RQ3: How might academic perceptions be used to influence implementation of HEI Educational Technology?**

- a. Can academic perceptions result in more inclusive Ed Tech implementation for all stakeholders?
- b. What conceptual framework(s) would allow academic perceptions to influence the implementation of educational technology?
- c. What are the implications of academic perceptions on the implementation of equitable, inclusive and pedagogically useful Educational Technologies?

## B – Pilot questionnaire findings

### RESULTS: EdDoc XXXX Pilot Research Questionnaire on Blended Learning

**01 How long have you worked within the School of XXXXX? Tick one box only.**

- ☐ 21-30 years (13)
- ☐ 6-10 years (8)
- ☐ 11-15 years (6)
- ☐ 16-20 years (5)
- ☐ 2-5 years (3)
- ☐ 31+ years (2)

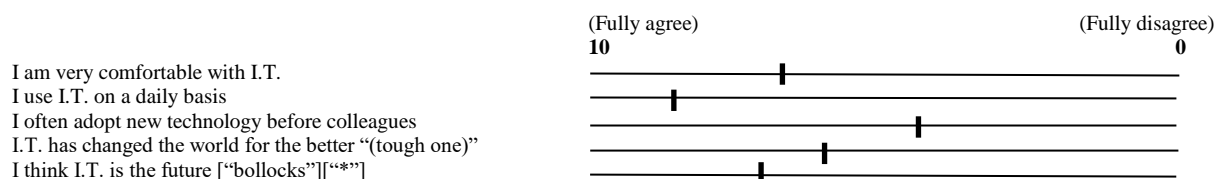
**02 How many years teaching experience do you have in Higher Education? Tick one box only.**

- ☐ 21-30 years (15)
- ☐ 6-10 years (9)
- ☐ 11-15 years (6)
- ☐ 16-20 years (4)
- ☐ 2-5 years (1)
- ☐ 31+ years (2)

**03 Overall, would you say that you have a positive or negative personal experience with I.T. in general? Tick one box only.**

- ☐ Positive (28) “Generally positive, however at times negative”
- ☐ Unsure (6) “Functional, but not particularly enabling”
- ☐ Negative (1)
- ☐ Other, specify (5) “It’s positive when I am working with my own system but not so positive when working with institutional systems. In general, tho, I’d say I appreciate & value I.T. for myriad reasons & purposes”, “OK, although I tend not to embrace it”, “It has been mixed. Some IT very useful but proponents usually over-emphasise the benefits”, “Limited support for XXXX staff”

**04 How would you describe your relationship with I.T. in general? Please place a ‘|’ on each line below to indicate to what extent you agree with each statement, where 10 is full agreement and 0 is full disagreement.**



**05 Please feel free to expand upon any of your responses below....**

“Not a very high-tech person! Use mainly for emails and word processing.”

“Difficult to place the last one ‘IT is the future’ as there is an inclination to put what one thinks it should be”

“It is part of the future but not ‘The future... especially when we now have to teach school children how to speak to each other face-2-face”

“A bit behind on new technology atm (lack of time), but have always tried to integrate new ???? into my teaching”

“Technology can be a curse as well as a blessing. When it goes wrong it has massive repercussions. It goes wrong all too often! Technically-challenged folk (like me) often find it hard to make sense of the ‘reasoning’ behind technological processes.”

"I.T. can be a very useful tool in teaching. However pedagogic concerns must drive the use of I.T. Too often we are encouraged to utilise I.T. for its own sake. I.T. can supplement but never replace face to face contact with students."

"See Krotoski's 'Digital Revolution'"

"I.T. is great but 2 reservations: not sure its impact on the environment is sustainable; and we don't know what impact it's had on the generation(s) who have/will have grown up after its explosive advent"

"I.T. is a blessing and a curse! Email is enough to cope with, let alone Arsebook and Shitter! Work/life balance threatened by 24/7 'contactability'."

"What is your definition of I.T.? How can I know if it is the same as mine! I think my definition – for my purposes – is quite narrow!"

"The last 2 statements are examples of the hyperbole referred to above"

"\* Depends what this means. It will play an important part in the future but it will, and should, never replace the classroom teacher"

"There are many positive aspects about I.T. but I am not fully convinced that it has changed the world for the better. E.g. language use due to texting has lost formality, communication has not improved. However, speed of information dissemination has improved."

"Technology is the way forward – however, equipment are not reliable to give me confidence for my teaching – Better quality equipment and regular maintenance is needed."

"If by I.T. you mean email, texting, word processing, GOLF, E:Mission. More specialist I.T. Lillypad/blogs/etc not so comfortable."

"[I.T. has changed the world for the better] and for the worse – depends how you look at it."

"[I think I.T. is the future] not sure what this means."

"IT controls drones and nuclear weapons. IT puts the world's knowledge at our fingertips. It's made communication faster – but I wouldn't want to claim a blanket positive or negative effect."

#### 06 How often do you use I.T. for the following purposes? Tick one box for each activity.

	Each day	2-3 times per week	Once Per week	Less than once p/w	Never
Delivering Lectures ["Giving Lectures"]	21	18	1	0	0
Contact with colleagues	34	4	0	1	0
Teaching preparation	26	10	2	1	0
Contact with students	29	7	3	0	0
Locating resources	18	14	4	2	2
Preparing learning resources	14	12	8	5	0
Collaboration with others	17	7	3	9	1
Preparing reports/guides	10	4	9	11	1
Evaluating & monitoring student progress	9	7	9	11	1
Moderation & assessment of student work	10	5	7	10	4
Rating and reviewing research	5	5	8	11	5
E-Portfolio	3	1	4	6	23
Other	2	1	0	0	0

"Speech to text to make electronic feedback viable/economical"

"These responses apply to term-time teaching & some answers depend on when in term, e.g. moderation."

"What's the difference between [Evaluating & monitoring student progress] & [Moderation & assessment of student work]?"

"What's the difference between [Contact with colleagues] & [Collaboration with others]?"

"[Rating and reviewing research] Do you mean reading/doing desk research or something different"

#### 07 In your opinion, how important is I.T. to teaching within Higher Education? Tick one box only.

- ☐ Very (24) "But not an alternative to the classroom teacher"
- ☐ Fairly (14)
- ☐ Somewhat (2)
- ☐ Not very (0)
- ☐ Not at all (0)
- ☐ Other (0)

"It is now engrained in every aspect of HE"

"It is where our students learn"

**08 What is your feeling about your own I.T. use within your role? Tick one box only for each statement.**

“This question assumes I teach – which I currently don’t”

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I.T. helps me keep organised	13	18	6	3	0
I.T. makes my teaching more interesting	10	18	12	0	0
I.T. provides a proven and tangible benefit to H.E.	13	14	13	0	0
I think I need to learn more about I.T. opportunities in H.E.	8	15	15	1	1
I.T. makes me more efficient & productive	8	13	15	2	1
I feel ahead of my peers with regard to I.T. usage	3	7	13	7	6 “depends”
I feel ahead of my students with regard to I.T. usage	4	4	4	13	9

**09 What forms of University endorsed I.T. software do you use in your current teaching role? Tick all that apply.**

- ☐ ‘GOLF’ (40)
- ☐ ‘E-Mission’ (40)
- ☐ MS Word (39)
- ☐ MS PowerPoint (39)
- ☐ Adobe Reader (PDF) (30)
- ☐ Windows Media Player (29)
- ☐ Power DVD Player (24)
- ☐ MS Excel (17)
- ☐ Windows Movie Maker (8)
- ☐ ‘Lilypad’ (7)
- ☐ MS Access (6)
- ☐ SPSS or NVivo (6)
- ☐ MS Publisher (4)
- ☐ RefWorks (3)
- ☐ Other, please specify (7) “Xerte”, “Celex / Epson VS5000 Photo/Fax”, “online database via web browsers”, “Atlas-ti” “Dragon Naturally Speaking”, “Turning Point”, “Turnitin, Turning Point, Surveyor”, “Range of Apple Software”

**10 How user friendly do you find University endorsed I.T. Software? Tick one box only.**

- ☐ Somewhat user friendly (30) “except for Lilypad (ask my students if you don’t believe me!)”
- ☐ Not very user friendly (5) “GOLF is rather abysmal compared to other VLE packages”
- ☐ Very user friendly (2)
- ☐ Other, please specify (2) “My own inadequacies prevent me answering”, “Mac to PC – issues”
- ☐ Very user unfriendly (1)

“I only run clean un-imaged machines”

“I tend not to use them. I like GOLF. XXXX is OK. I really dislike XXXX.”

**11 Do you use any I.T. hardware for teaching purposes that is independent of the University? Tick all that apply.**

- ☐ Own laptop (25)
- ☐ Own PC (21)
- ☐ Own smartphone (11)
- ☐ Own tablet (5)
- ☐ Other (4) “Camera and headphones for WebEx”, “Apple iMac”, “Printers”, “Printer – at my expense”, “Pages, Keynote”
- ☐ Own netbook (4)
- ☐ Own PDA (1)

**12 Do you use any I.T. software for teaching purposes that is independent of the University? Tick all that apply.**

- |  |  |
|--|--|
| <input type="checkbox"/> YouTube                                 | (28)   |
| <input type="checkbox"/> Media Players (QuickTime, Real Player)  | (19)   |
| <input type="checkbox"/> TV Catch-up sites                       | (14)   |
| <input type="checkbox"/> DVD Player (i.e. Intervideo WinDVD)     | (13)   |
| <input type="checkbox"/> CD/DVD Authoring (i.e. Nero, etc)       | (12)   |
| <input type="checkbox"/> Skype                                   | (11)   |
| <input type="checkbox"/> Non-I.E. Browser (i.e. Chrome, Firefox) | (9)  |
| <input type="checkbox"/> Google Earth                            | (7)  |
| <input type="checkbox"/> Facebook                                | (7)  |
| <input type="checkbox"/> Other streaming video sites             | (5)  |
| <input type="checkbox"/> PDF Editor                              | (4)  |
| <input type="checkbox"/> Image Manipulation (i.e. Photoshop)     | (4)  |
| <input type="checkbox"/> Audacity                                | (3)  |
| <input type="checkbox"/> Twitter                                 | (3)  |
| <input type="checkbox"/> Dragon Dictate                          | (3)  |
| <input type="checkbox"/> Video Encoding/Conversion software      | (2)  |
| <input type="checkbox"/> Second Life                             | (0)  |
| <input type="checkbox"/> Other (please specify)                  | (8) "WebEx", "Atlas-ti", "Radio catch-up sites", "Coropora",<br>"Facetime", "Pages, Keynote" |

**13 If you use any I.T. hardware or software independent of the University, could you please elaborate upon the reasons why?**

"Distance contact with students, keeping up to date with interesting research results, using these in teaching. Making lectures less monotonous"

"Digital Camera use (photocopying, research, etc – this includes more integrated use of my own smartphone"

"It is much more flexible for managing video content. Uploading video files is a nightmare for both students & staff using GOLF & Lillypad. Skype/ooVoo is useful for tutorials – especially in XXXXXX"

"I am involved in XXXXXX & the university needs to catch up with what it is asking us to do!"

"VLC Media Player"

"The university's soft/hardware doesn't meet my multi-platformed needs, in and out of the classroom."

"To work from home"

"Availability & convenience: more accessible at home"

"Own laptop at home – convenience since I live in XXXXX"

"Atlas-ti is not supported by the University, but I am using it for research purposes."

"Often use video clips for discussion in class"

"University follows rather than leads"

"The images/video clips available via YouTube can't be accessed via Univ. software"

"This year I've really discovered how useful YouTube can be in teaching – short clips, etc, which I never thought would be so readily available."

"iTunes to run Smart Phone at work & listen to music."

"The university has been slow to become Mac friendly. I find Macs more intuitive."

"Firefox is more compatible with Turnitin, which I use not only for originality checking but also as an assessment & feedback portal for both formative & summative work."

"I use it at home for lecture preparation and research"

"I have used YouTube to post up sample translations filmed on an iPhone. GOLF cannot cope with our clip sizes. I used Skype for long distance assessment of sign language, it's also very useful to communicate with deaf colleagues."

"Mac work, Pages and Numbers – Limited to PC software"

"MP3 dictaphone – supplied by another organisation"

"I'm a Mac user. The university doesn't buy or support Macs, so I bought and used my own."

**14 Do you think that current School I.T. use addresses student requirements? Tick one box only. ["do you mean provision or policy?"]**

- ☐ Yes (17) "Guess so, but don't know what students want/expect/prefer"



- ☐ Perhaps, please specify (10) “Not sure what students expect”, “students are arguably more attuned to social media”, “Can’t really judge as their needs/habits unlike mine”, “I think the school assumes students prioritise tools over content.”
- ☐ No (7) “Students are less savvy than we assume”
- ☐ Depends on (5) “Not sure”, “Student”, “Video requirements”, “Don’t know”, “the student – no for those who are IT savvy & confident... and yes for the beginning users”, “Individual IT requirements”, “The student requirement. The phobic doesn’t seem to receive enough help since the centre in HLC closed.”, “the course (if referring to students generally). For my course there are some difficulties.”

“Although things are changing all of the time & sometimes the Uni is slow to catch up.”

**15 Do you think that current School I.T. use addresses academic staff requirements? Tick one box only.**

[“do you mean provision or policy?”]

- ☐ Yes (18)
- ☐ Perhaps, please specify (8) “I imagine there are many staff with different needs”, “it does the basics but little more”, “If I were more receptive to new technology”, “Macs required! Classroom equipment too often unreliable”
- ☐ No (8) “Too formulaic”, “Only recently has the uni embraced Mac/Apple”.
- ☐ Depends on (5) “Not sure”, “Video requirements”, “the staff – no for those who are tech savvy & want to use more... and yes for technophobes”, “what staff needs are”, “functioning of the equipment”

“Because computers in offices are so slow. I have to switch on, switch off, switch on again, but hurrah in July our office will have new computers! So, I have to work at home with faster computer!! Also, to save energy, office computer turns itself off while I’m away! So, more time to reboot!”

**16 For what reasons do you incorporate I.T. into your teaching? Tick all that apply.**

- ☐ IT saves time and resources (25)
- ☐ Paves the way for good learning (24)
- ☐ It is pedagogically sound to (21) “It can be (it can also be a curse in the wrong hands)”
- ☐ Essential for some modules (21) “XXXXXX modules 100% need it!”
- ☐ Enjoy it (18)
- ☐ Institutionally obliged to (14)
- ☐ I don’t (0)
- ☐ Other, please specify (4) “Use of ppt for visuals”, “For Student interest, for student engagement”, “Way students communicate/think/etc”, “However I.T. practices, such as using GOLF for formative feedback, definitely more time consuming.”, “Sometimes it is for efficiency, sometimes to add interest”

**17 What prevents you from including more I.T. within your teaching? Tick all that apply**

- ☐ I am happy with the amount I use (21)
- ☐ It takes a long time to trial initiatives (14)
- ☐ I prefer human social contact (14)
- ☐ Need more training (10)
- ☐ Not aware of what other I.T. I could use (7)
- ☐ I am technologically inept (6)
- ☐ Technology frightens me (5)
- ☐ Too many obstacles (5)
- ☐ Don’t like University endorsed software (3)
- ☐ I avoid technology whenever possible (2)
- ☐ I don’t see the point (1)

☐ Other, please specify (3) "Resistance from staff"  
 "There are far too many restrictions for staff use (logging into MS Outlook every 4-5 minutes for 'inactivity' seems paranoid on a point of security. I log in 30-40 times a day. We need more storage space on our desktops. Where is Windows 7?"  
 "Ignorance & most of all lack of time to explore"  
 "I am not very visual – I am print based so find it difficult to think of how image/sound/clips would help. Plus, lack of time/energy with heavy teaching load and several modules."

**18 In an ideal world what type of I.T. resource, hardware or software, would you consider incorporating into your teaching?**

"Lillypad (never got used to it) never had enough time (or inclination) to invest in it; Whiteboard"  
 "Lots of scary ideas such as Lillypad etc"  
 "iPads"  
 "Interactive whiteboards"  
 "More WebEx conferencing"  
 "Any that could help me in my teaching"  
 "not IT literate enough to know"  
 "Don't know"  
 "Don't know!"  
 "Providing video clips etc for students to access outside of class"  
 "Decent Smartphone networking on Wi-Fi"  
 "I'd like to be better equipped and/or skilled at showing video/film in class, in bite-sized extracts without wasting time finding material. Also, fast and easy ways to scan printed text into electronic form to upload. That would be great."  
 "Depends on Broadband speed!"  
 "Too ignorant to answer this"  
 "Haven't a clue"  
 "Use of iPad technology, use of Skype for feedback (have started offering where face to face is impossible). Filming/editing software (basic)."  
 "Wi-Fi from Pad to Data Projector. Sending data to the server – so that students can retrieve it straight away"  
 "Lillypad"

**19 What is your opinion of the School Blended Learning strategy? Tick one box only**

- ☐ It is a robust strategy that serves academic staff well (2) ["It is a 'fairly' robust strategy"]  
☐ It is a useful strategy that might be of use to academic staff (11) "(an adequate strategy)"  
☐ It is a lacking strategy that is of little use to academic staff (13) "Poorly worded and patronising"  
☐ It is a poor strategy that is of no use to academic staff (2)  
☐ Never seen it or have no opinion but have heard of it (5) "I have no idea what policy is!!"  
☐ Never heard of it, never seen it and can't comment (0)  
☐ Other, please specify (2) "Pluses & Minuses", "it is a strategy devised by Management that does not take into account the realities of pedagogic practice in this institution.", "Neutral", "Some bits are sensible and others are not v.relevant", "Think I saw it ages ago but can't remember"

"[the strategy] is not of 'no use', but with little-to-no practical knowledge of how long it takes to develop a blended learning program – one that works with other non-I.T. elements in a module. Little evidence to suggest I.T. strategy authors know what can & can't be done in classes of this size, with our standard of facilities."  
 "Can't say I understand it – The Policy."  
 "Not sure I'm aware of a school policy; I am familiar with the University Policy."

**20 Who do you think should take the lead on developing future I.T. policy in the school? Please rank the most important with numbers 1-5, with 5 being the most important to you and 1 being the least important to you.**

- ☐ Academic Staff (125)
- ☐ Students (100)
- ☐ IT Services (80)
- ☐ School B.L. Co-ordinator (82)
- ☐ Univ. B.L. Co-ordinator (59)
- ☐ Learning Centre Staff (41)
- ☐ Senior Management (32)
- ☐ [Internal Dept] (25)
- ☐ External consultants (24)
- ☐ Other, please specify (1) "Should be developed together with BL co-ordinators and academics & students, not in isolation."

"Engage/consult the teaching staff (who know how to teach) and do **NOT** impose 'good ideas' that are pet projects of corporate managers who don't/can't teach!"

"No View"

**21 Why do you think that some staff might resist using I.T. within the school for teaching? Please tick all that may apply.**

- ☐ Technophobia (30)
- ☐ Don't have the time (20)
- ☐ Fear of equipment failure (19)
- ☐ Don't appreciate the benefits of it (18)
- ☐ Don't have the inclination (18)
- ☐ Don't trust it (15)
- ☐ Object to deskilling of academic staff (14) "Although I don't think it does deskill"
- ☐ Lack of dialogue about using I.T. (12)
- ☐ Poor fit between tools and intentions (10) "e.g. Lillypad"
- ☐ Little pedagogic benefit (8)
- ☐ Objection to its implementation (6)
- ☐ Lack of choice of I.T. tools (5)
- ☐ Other, please specify (2) "I cannot comment", "Because it is about standardisation + conformity"

"This is an interesting question – you are asking me about OTHER staff – how do I know?"

"Unable to comment on others' views"

**22 How might we improve staff engagement with I.T. within the School? Please rank the most important statement to you with numbers 1-5, with 5 being the most important and 1 being the least important.**

- ☐ Provide contracted hours for I.T. experimentation (113)
- ☐ Provide extra training, support and hardware (90)
- ☐ Ensure that equipment is up to date and operational (88)
- ☐ Pilot new initiatives properly (86)
- ☐ Provide pedagogic rationale for new initiatives (70)
- ☐ Encourage dialogue between strategists and academic staff (50)
- ☐ Offer rewards for early adopters (35) "I strongly disagree with this"
- ☐ Allow staff to experiment with non-standard software (35)
- ☐ Focus upon enthusiastic staff followed by reluctant staff (34)
- ☐ We don't need to intervene - people increasingly literate (23)
- ☐ It shouldn't be improved (1)
- ☐ Other (please specify) (0)

"It is also important to have training to suit individual learning styles"

### **23 OPTIONAL: How would you like to see the School's relationship with ["information"] technology develop in the future?**

"I would like to see students' and the university's expectations reflected in hours allocated to staff for the development of blended learning. I feel that while some staff are extremely committed to this area, many do not appreciate the pedagogic value and see it as an extra burden that lessens the value of the student experience. I would like to see more consistency in the way it is used across modules (where appropriate) as the quality of 'blended learning' offered in lieu of teaching time is not consistent for students."

"My main concern/objection is the extent to which there is an expectation – from students and the school – of a consistency in use. In other words, in the spirit of pluralism & diversity, I see no problem if some colleagues use lots of technology and others very little. Effective teaching need not be 'one size fits all'."

"Organically. There is too much top-down imposition & expectation of staff to adopt certain modes of delivery without a fully researched pedagogic rationale. There is also v.little real support beyond the often ?????? 'training' sessions. Incentivise the use of technology/technology supported learning by giving staff the time, resources & acknowledgement in terms of WLA to trial new approaches."

"I am not sure how to answer this since I'd probably say invest in iPads and loads of multimedia & social media software, which many colleagues I know would 'bitch slap me' for even thinking such a thing. In an ideal world, I'd say let the school invest in hard/software according to each staff member's teaching/subject needs as the McDonaldization of IT isn't always necessary or beneficial to staff & students and school."

"At the moment, it does seem a little piecemeal, and most of all, staff do not have enough time (whatever their level of enthusiasm). More hours need to be given and made available during term time. E.g. not just '100 hours' but every Tuesday PM during semester?"

"More training and awareness of new technologies – especially for staff like myself who are not always confident in trialling new initiatives in I.T."

"With far more consultation with staff & students"

"There is a place for I.T. in the H.E. institution. However, there is a tendency for I.T. to drive forward changes in teaching practice. This is the wrong way round. Furthermore, different lecturers have different teaching styles, and this should be encouraged. There is too much pressure on staff to adopt I.T. for its own sake. Those members of staff who do not wish to use I.T. should not be pressured into doing so. Students should encounter a wide range of teaching styles and over use of I.T. can lead to more homogenous teaching styles, which is detrimental to the learning experience. I.T. should be available as a resource for teachers to use as and when they see it to be useful."

"Consultation needs to take place well in advance of initiatives to significantly alter/impose/upgrade equipment & software. Precipitous implementation of goals / required practices / expectations that have no basis in the institution's physical or technological reality do enormous damage. Example: Blended Learning entitlement 5 or 6 specifies all modules offer sessions where students can interact with staff digitally during class time. Yet I know of only 3 venues on campus where a group of 20 students or more can do so, in an institution with an acute rooming shortage."

"More help with how to manage conventional paper-based IT without duplication & messiness. Feedback on student work – I'd to experiment with audio-feedback but am concerned about burden of moderation for colleagues & 'physical' record of marking/moderation."

"The school must promote well-attested new methodologies, while acknowledging the preeminent position of the classroom teacher. New technology is not (and never will be) a replacement for human contact."

"Video cam / web cam link IT for Deaf Staff & Student. More Live chat on the computer to resolve issues"

"Sustained training through workshops and follow up 'homework tasks' led by other staff – peers who have used their I.T. successfully, not externals."

"Individual members of staff are using I.T. in innovative and pedagogically sound ways. However, the school & university management seem to think that anything new and shiny is both (a) pedagogically progressive and (b) a good way to cut back on staff and rooming. These are not naturally compatible. 'Efficiency' and good

education aren't always compatible. Nor are students automatically impressed by blanket IT use – they can spot the distancing effect which sometimes occurs.”

**24 OPTIONAL: Are there any other comments you would like to add? Or elaborate upon any points already covered?**

“Maybe later... I'm a delayed processor so will undoubtedly think of loads to say after I submit this to you. I know... could the university/school allow staff to be able to download software on to their uni PCs/Laptops without having to fill in a gazillion forms & ask special permission and wait for (very busy) IT staff to make an appointment to upload it for us?”

“It would be great if staff were made aware of students' expectations in this area. Actually, I am not sure what those expectations are myself! I'd like to know how they have experienced blended learning through school and college and whether they expect the same from H.E. or whether they see University as a different type of learning environment. Regarding the Blended Learning Strategy, in my experience it is very easy for departments to interpret the goals in a way that is very achievable – even if they are just putting some p.p. slides up on GOLF. As a document it doesn't seem to encourage innovative usage of technology.”

“GOLF is by far & away the most primitive VLE I have encountered. In comparison to Blackboard/Moodle it is an antiquated, chugging device that barely provides the basics (uploading lectures, notes, seminars, etc). I would like to stream videos/images etc, but I have been told that there is not enough bandwidth for this; in the end one gives up rather than go through the hassle of fighting with it obsolescence. There is also a severe shortage of lab space. I like to work with XXXXXX but end up getting shifted to dismal rooms at inconvenient times to room this basic request.”

“University of XXXX – and XXXX – must begin going 'more I.T'. and possibly even online/???? If current government-imposed education trends continue (ex: CAP).”

“XXXXXX, so I am told, is becoming a 'priority'. So, invest some real time and money and let those who believe in it do it and support them.”

“Sorry Pritpal – had to rush it!!!”

“Good luck with your research”

“Many in our generation developed working & thinking habits before I.T. so resist using it now. But locally, I.T. gets a bad name because it is forced into an association with advocates within our institution who lack credibility. Again, going back to [Learning Perks], waving a template (in lieu of a magic wand) and declaring all modules will have 2 hours of blended learning each week to match the 2 hours of traditional contact time, when 60-70% of staff have no experience, confidence, or remote idea how to do this, fools no-one, and makes the job of winning over the resistant and faint-hearted all the more difficult. An unnecessary, but entirely characteristic own goal.”

“Marking & feedback electronically & keeping record is complex – almost needs a split screen or 2 screens. I feel that we must not be coerced & made to feel like naughty school children. It must come from us, but examples of best practice & enthusiastic, patient demonstrations are to be welcomed. I also feel that certain subjects 'go together' more readily with certain types of I.T. than others. Being middle-aged I am also experiencing eye strain when working on computer – relieved that our new screens will be larger. I was new to Lillypad in Feb 2011 & was very pleasantly surprised at how quickly I adapted to it, now I love it, BUT it gives me hand strain.”

“Meet up and discuss more options etc”

## C – Participants

### Biographies and summaries

The number in brackets following each name indicates which round(s) of data the participant contributed to.

#### **Ash (1)**

Was a long serving academic with responsibilities for facilitating, training, supporting and encouraging Ed Tech use amongst his colleagues. At the time of interviewing he was towards the end of his employment service, partly since he was becoming increasingly disillusioned with the demands of his Ed Tech role. The interview was dominated by pessimistic projections about the role of Ed Tech in HEIs. His impending retirement, I felt, had implications about how candid he might be with declarations because I already knew that he was becoming increasingly despondent about his role. He was nationally recognised for using social media to deliver a taught module but lamented that the “institutional bloody juggernaut” which “crushes everything in its path” was not interested in his idea. He was a firm advocate of the practitioner voice and giving staff time to ‘play’ with new ideas to see if they work for them, or not, so that Ed Tech usage grows organically rather than via top-down imposition.

#### **Bob (1, 2, 3)**

In his early 40s, Bob was a senior lecturer with a varied teaching portfolio, bespoke use of Ed Tech and a career trajectory that spans either leadership or research direction. He represented a forthright and critical perspective and stayed quite consistent about most his outspoken views through the three rounds of data collection. He believed that new Ed Tech initiatives should be based upon sound pedagogic rationale that values the ‘live’ two-way student-teacher relationship and does not undermine the autonomy of academics. He believed that too many Ed Tech initiatives draw upon pre-determined structures and particularly dislikes any Ed Tech proliferation that is linear, distancing and encroaches on work-life balance of both staff and students. He strongly objected to social media being used for teaching and believed we should be much more critical about what I.T. tools we use to teach. He also argued for teaching activities to make use of symbolic exchange because “students are not happy with the distancing effect of I.T.” in the way that we’re led to believe.

#### **Carl (1)**

Was a senior lecturer of over twenty years’ service who was largely student and teaching focused though has strong research potential too. He was very keen on the idea of professional autonomy and rejected the encroaching administrative burden (which dominated his pre-teaching career) which he believed is misguided and managerial. Carl disliked top-down imposition and his interview provided almost extended critique about certain internal structures within the HEI, for which he drew upon conspiracy theories about their existence. He explained that “we’re employees kicked about as if we do menial labour and we’ve got no brains, so it does not matter if blended learning is flawed”.

**Dee (1, 2)**

In her late 50s, Dee was another outspoken critical academic with a wider pedagogic remit around learning and teaching matters. She had a long service history and particularly objects to organisations making the same mistakes repeatedly. Dee was not afraid to challenge anything she feels is unjust, misapplied or simply wrong and these characteristics illuminated her comments throughout interviews. She objected to the “one size fits all” fashion-vulnerable I.T. stratagem, even suggesting that I.T. could be a diversion for real student/teacher interaction or appropriated as a ‘cover’ for poor teaching. She believed that technology is essentially neutral, raising the important point about how cultural use can affect its meaning. She argued that certain I.T. initiatives are politically retained, despite their flaws, because they are personal status driven. She also believed that the blended learning strategy was badly named, which is partly why it cannot win over the hearts and minds of certain academic staff.

**Eve (1)**

In her 40s, Eve was not a teaching practitioner, but her role supported the implementation and co-ordination of teaching professionals that wished to (or were tasked with) incorporating Ed Tech into their teaching practice. She was very keen on the idea that pedagogic practice should be paramount and that teachers should consider what they wish to do with Ed Tech before considering the best platform to use. Her role was university wide and she believed that lack of staff time is the major factor for academic staff resistance to I.T. resistance. She believed that not all software is appropriate for all staff needs, leading to the ‘Marmite’ idea of either loving or hating certain platforms. Interestingly, she mentioned a space in between the top-down and bottom up “where all the exciting stuff happens”.

**Fay (1, 2, 3)**

In her late 40s, Fay began as a very e-luctant member of staff who began at the University well over a decade ago. She believed that academic freedom should be paramount and pedagogic exploration should drive learning & teaching approaches. She did not recognise institutional authority and paid little attention to the structures through which this authority is enforced. She believed that our recent strategies for Ed Tech are an attempt to regain the ‘innovative’ edge we once had as a HEI, but she exercises caution about over-use in the classroom. Fay was chosen for her particular I.T. innovation that emerged from a position of adversity and has now given her an international reputation. She was previously very reluctant to use technology but was obliged to incorporate I.T. into her teaching as part of her staff induction. She explained that she didn’t approach Ed Tech “from a techy perspective” and she now engages with social media as “neutral interfaces” to the outside world. She accepted that her bespoke practice probably meets some Institutional blended learning goals but explained “it’s got to come out of a pedagogic desire rather than any other desire”.

**Hugh (1, 2)**

In his 50s, Hugh was a senior lecturer with two decades of service at the HEI and involvement in a ground-breaking Ed Tech distance learning initiative. Ironically, he considered himself as “more luddite than anybody” who “didn’t use a lot of IT in the classroom” because his “computer skills were rubbish” and he wrote his PhD on a Brother electronic word processor which “was like the size of a small barn”. He asserts that “our generation is not that, is not as comfortable with IT as everyone who’s coming on after us” and whilst some staff will take to it “like a duck to water” others will be “hiding under the desk hoping they never have to look at it” but we shouldn’t get too preoccupied with forcing change because “in terms of IT, that problem will solve itself eventually because, you know, we will retire and die basically”. He was quite cynical about the managerial dimension of what Ed Tech represents and felt there were too many arbitrary decisions made in the institution that affected stakeholder practice. He viewed Ed Tech as being too focused on trimming costs and believes this was a crucial factor in the potential change of VLE. He distrusted senior management but does believe in the importance of some level of management in education that “forces the stragglers to eventually accept the inevitable” with Ed Tech.

**Greg (1)**

In his late 50s, Greg was a former practitioner turned Ed Tech strategist who was central to blended learning decisions, implementation and evaluation. He reports to a variety of internal committees and leads on pan-HEI stratagem for incorporation of learning technologies. Whilst he found the interview process refreshing “I’m finding this very interesting because you don’t return to these kinds of fundamental questions you see” he had limits to how much questioning he was amenable to. On the issue of whether academic staff should be allowed input into Ed Tech policy he replied, “To a certain extent but on the other hand I am not paid what I am paid not to be able to make a good stab at that”. Before the audio recording began he declared that he would answer in his professional rather than personal capacity, the latter of which might have been more lifeworld focused.

**Ida (1)**

Was a senior lecturer in her early 60s who had a relatively benign and enthusiastic relationship with technology and became an academic blended learning co-ordinator as a consequence. She is an advocate for technological driven change but equally protective of established mechanisms that work well for learning and teaching. Ida suggested that this academic expertise is undervalued: “It would be much better if they came to the people with the blackened faces and said listen this is going to work, but they never do.” Ultimately, she believes that change management “always has to be an exchange otherwise it does not work”. She was the only participant with direct experience of Moodle as a learning platform and went on to explain that “I’m here to climb on the barricades if they do anything about GOLF and it is so silly not to use it as a third-stream income opportunity, you know, educational platforms”.



**Jayne (1, 2)**

Was a senior lecturer in her late 40s who attends a pan-University committee in her capacity as academic representative. She was a keen technological enthusiast but did not endorse all university approaches to Ed Tech and was very critical in her comments. She once had responsibility to implement a University wide Ed Tech initiative that she was personally very supportive of but experienced academic resistance during the implementation. She disagreed with 'one size fits all approaches' to Ed Tech change which she believed was driven by institutional economic demands rather than staff/student pedagogical choices though she was happy to experiment with tech that she believes is "useful for the students" as long as it didn't cut down on face-to-face time with them. Jayne subscribed to the idea of "let's try it and see what happens". She believed that we were very lucky to have such good internal Ed Tech support which, combined with an academic Ed Tech enthusiast, could provide better pedagogic advice to colleagues. Jayne also believed that in a context of top-down initiatives, it is a good idea to share practice amongst peers to "show them what you are doing and see if we can get a bottom/up approach" instead. Regarding Ed Tech implementation she believed that without mandates some academics will say: "No, I'm not going to do it" and then their students will lose out possibly, so she believes it is difficult to find a balance.

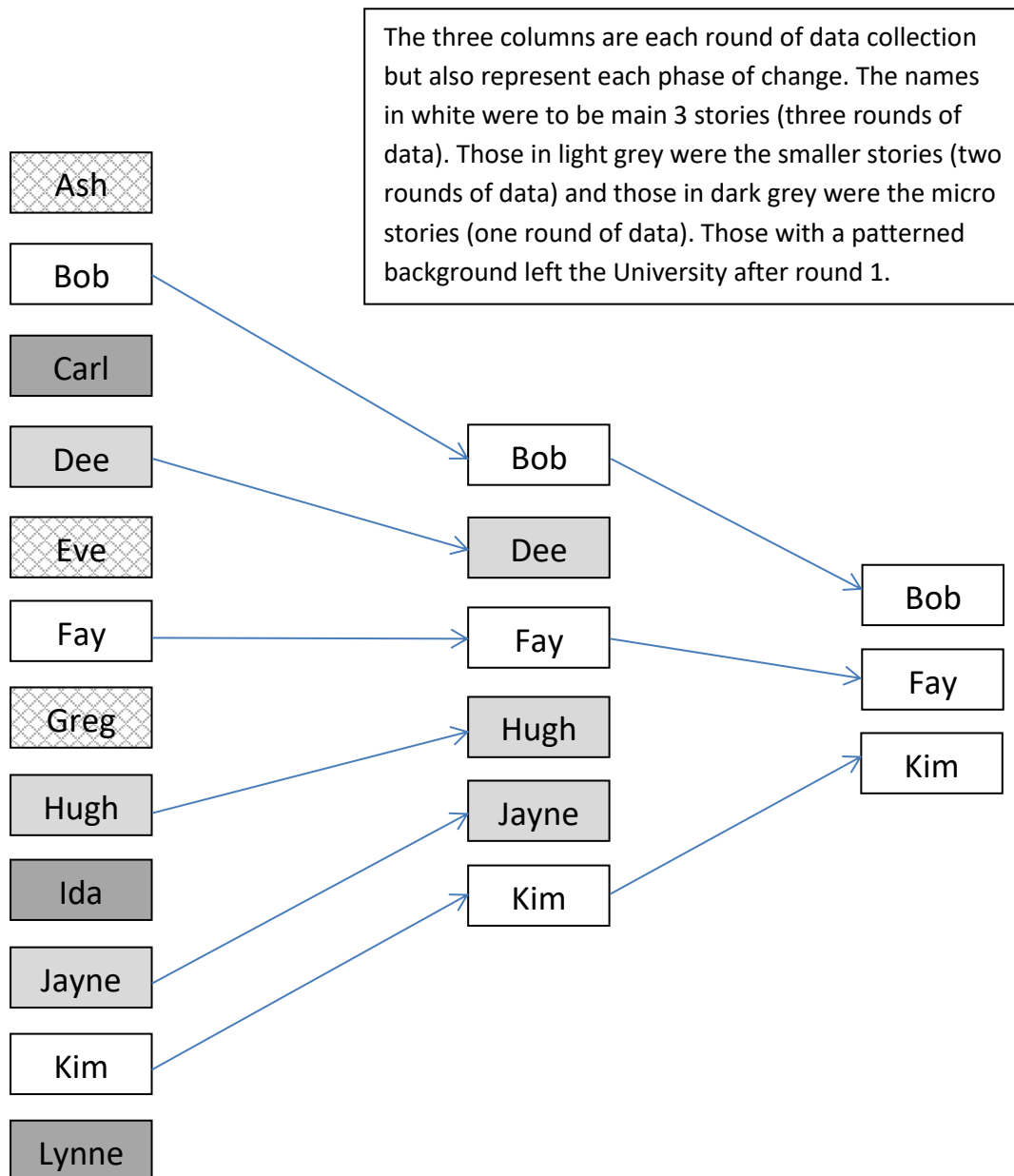
**Kim (1, 2, 3)**

In her early 50s, Kim was a senior lecturer whose pedagogic interests led to an internal research secondment that involved sharing good practice and leading pedagogic change internally and strategically. As such she had explored Ed Tech with a few 'hats' on and can see things from a number of perspectives. Kim's Ed Tech journey began with her being quite amenable to change and then moved towards being more 'entrenched' as her experiences and circumstances unfolded. Kim was very adept with Educational Technology: having to teach herself "a PhD's worth about the theory and the different platforms" when she launched a new programme of study a few years ago. She was always "looking for the rabbit holes" that can be explored by engaging with technology but asserted that technological platforms should never drive the pedagogy: quite the reverse in fact. Kim objected to misinformed 'top-down' directives that tend to favour one technological platform over another. Part of this is what she calls 'econo-production and techno driven directives'. Kim supported the idea of a staff-led pedagogy that identifies a need before considering a tool to serve that need. She explains that "I can't think of a single person who's actually beginning to theorise or actually working in the field who looks at it as being technology first, they always encounter people".

**Lynne (1)**

Was a senior lecturer in her early 60s with a service history of over twenty years. She introduced herself as hopelessly technophobic though it transpired she had quite a healthy, if arbitrary, relationship with technology (e.g. only using her computer in the study because she believed the Wi-Fi would not operate anywhere else). Lynne would avoid using technology whenever possible and did not like wholesale mandated organisational change, especially that change which she felt was incongruent with her practice. Despite being an adept user of Ed Tech, Lynne in no way found it appealing and would engage only when absolutely necessary or when mandated.

## Participants



## D – Interview questions

### Round 1 – Exploratory, unstructured and bespoke

Each participant was ‘warmed up’ in a friendly and bespoke way for this first round. I would ask them something light-hearted about their research activity, career background, detail from their online profile, etc, just to start them talking. Some of the fixed questions were:

- Tell me a bit about your job and yourself
- How did you get into the role?
- What do you like/dislike about it?
- Why do you think staff resist IT?
- How can we improve staff IT engagement?
- Are you familiar with the School Blended Learning strategy?
- Who should I approach to interview and why?
- Do you think my research is worthwhile?
- Do you think there is anything else I should have asked?

I followed the advice of Cousin (2009) to offer my own insights & perspectives, trying to listen more than speak, avoiding interrogation and inviting reflection on the ‘field notes’ taken during the interview. Apart from these prompts, the interview topics could go wherever they needed to in round one.

## Round 2 – Refined research questions and encouraging stories

In this round my research focus became clearer, and the interview schedule was much more structured, though deviation was still welcomed.

### **Warm up Questions**

- Can you tell me a little about yourself and what you do? (Specific tailored initial ‘chit chat’ about something specific to them, deliberately researched in advance, to get the conversation and rapport established).
- Tell me something about your personal or professional journey to where you are now?
- What has changed since we had our last interview?

### **RQ1: How do academic staff articulate their experiences of Ed Tech in the post-1992 HEI?**

- Tell me about the time when you first came across technology as part of your role. What was it like? Who were you with? What do you think about that now?
- How would you describe your particular perceptions and experiences of using Ed Tech in this HEI?
- Can you tell me more about the ways in which your role has changed since the widespread HEI adoption of Ed Tech? How do you feel about this change?
- Can you give me specific examples of how you have incorporated Ed Tech into your teaching? Was anyone else involved? How did it turn out?
- How has your relationship with technology beyond your HEI role changed over time? Would you say this has influenced your professional life and work?
- From your own experience, what Ed Tech has worked well for you? What hasn't? What are your thoughts on that?
- How supportive do you find the Institution towards your personal preferences with Ed Tech? Can you provide examples of this?

### **RQ2: How has the role of Ed Tech changed in the post-1992 HEI from the perspective of academic staff?**

- Can you give me specific examples of how your teaching practices have been changed by the Digital revolution?
- To what extent are you free to incorporate whichever Ed Tech platforms you deem pedagogically useful? Has this always been the case?
- Where do you think the increased institutional use of IT leaves you and your teaching role here? How do you feel about that?
- What do you suspect will transpire in the future regarding technology use for education?
- Do you think your experience might be shared by others in post-1992 HEIs?

### **RQ3: How might stakeholder experiences be used to influence implementation of HEI Ed Tech?**

- Can you recall a time when you were asked to contribute to HEI Ed Tech policy?
- In what ways have you and your colleagues contributed to the University's strategy for the development of Ed Tech?
- How might academic staff opinions be adequately gathered, interpreted and disseminated in order to improve things?
- Given unlimited time and resources, in what specific ways would you improve the current use of Ed Tech in our HEI?
- If you were given the task of reviewing the Ed Tech policy and systems in this university, who would you ask to help you design it, what would it look like and who would manage it?
- Do you think that stakeholder experiences can form the basis of more useful techno pedagogic implementation for all stakeholders in the future?

### **Round 3 – Reflective & focused upon areas where research questions have not been addressed**

By this round, my attention was on trying to get more detailed answers to research questions and the previously critical focus had abated (see question 12 as example).

#### **Main Question**

1. Thinking back to an Ed Tech innovation that was introduced into your workplace: how did it work out and would you have done it any differently, if at all?

#### **Methods for Implementation**

2. What is the best way to explore the use of proposed Ed Tech innovations in our HEI?
3. What criteria would you suggest should be included in our implementation and procurement policy for new Ed Tech?
4. Where or from whom should new ideas about Ed Tech come from do you think?

#### **Role of Pedagogy**

5. What kind of learning and teaching approaches work with your students?
6. What is the most important factor for you when choosing Ed Tech for learning and teaching purposes?

#### **Staff 'Voice'**

7. How important are academic staff experiences when proposing changes in HEI technological implementation?
8. Given unlimited time and resources, is there anything you would change in your own use of educational IT Innovations?
9. How important is academic staff freedom of choice when exploring new technology for the classroom?
10. What message would you like to give the VC and senior management about our use of Ed Tech?

#### **Institutional Role**

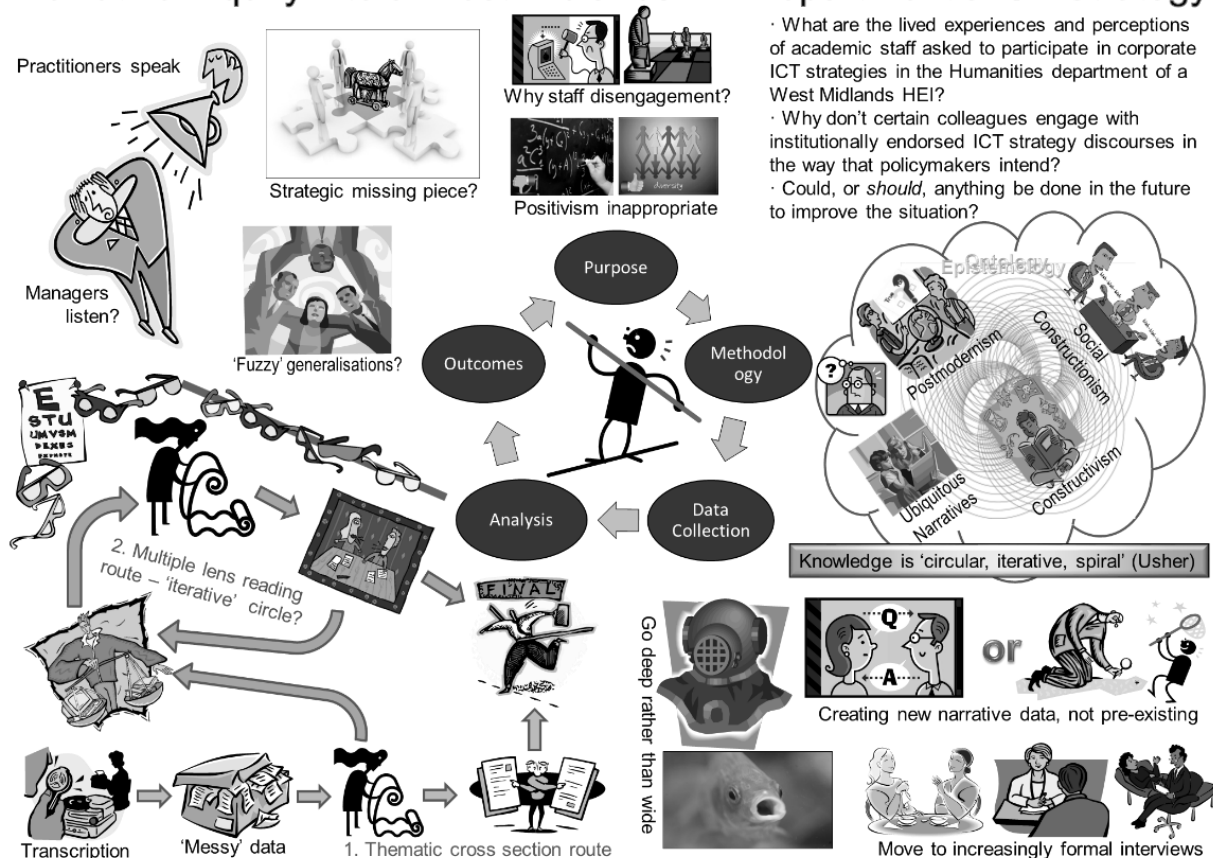
11. Think back to a time when you felt you needed specific technology to support your teaching. What help did you need to explore, what was out there that might be useful? What help did you get and what happened?
12. How can we balance institutional operational concerns (efficiency, resources, admin, ongoing support) with bespoke IT innovation requests from academic staff?

## E – Interview prompts

### Round one research poster

A poster designed in January 2012 that shows my critical thought process at the time. It acted as a prompt for discussion during the first round of interviews and was also a useful prompt to reflect upon in later interviews, where I could explain how I had 'moved on' with my research and thinking in later rounds.

### Narrative Inquiry into a West Midlands HE Department's ICT Strategy



(Images taken from the clipart function of Word 2007 software by Microsoft)

## Narrative approaches

During Interviews, these prompts were in front of me as I questioned the participants. I would scan them at various points and ask any that seemed appropriate at that time.

### ***Tips to encourage stories***

- *Ask participants to recall any incidents or events to support their views.*
- *Ask for clarification for anything interesting and unclear.*
- *Give some self-disclosure stories of your own to help them out.*

### ***Questions to develop stories***

- Can you tell me more about the time when...?
- What happened then?
- How did you get into that situation?
- Why do you think that happened?
- What was that like?
- Who were you with?
- How long did that go on?
- Was anyone else aware of what was happening?
- What did you think about that?
- How did you know that?
- Was that OK with you?

### ***If appropriate***

- When did you realise that could not continue?
- What would you have liked to have happened?
- When did you decide to....?
- Did you reach a satisfactory conclusion?
- How did you feel about .... now?

### ***Concluding Questions***

- Is there anything else you would like to cover?
- Are there any questions that you feel I have missed? Or are there any questions you wish I would have asked you?

## Bob's narrative 'smoothing' example

### Bob's Story 1

(Based on transcription from round one. Used as a recap at the beginning of round two with Bob. It also includes those themes that I asked Bob to expand upon during the 2<sup>nd</sup> round. This is to be transparent about my own pre-occupations in the data and to explore the themes that were becoming apparent in other transcripts.)

Bob came to the University of XXXX as a PhD student several years ago, taking on part-time teaching in several different departments before being offered a fractional post in two of them. He undertook a teaching qualification as part of his induction to the full-time teaching role. He is a popular member of staff with 'great colleagues' and has some forthright views on the way in which our HEI operates. He declares very early on that he loves teaching 'but there's too much of it, I'd like to get some research done but it's really difficult'.

Interestingly he declares that 'you're safe in the classroom' but does not quite elaborate on why that might be. I suspect that this is because Bob's story is rooted very firmly within institutional critique, declaring quite early on that 'our management is incompetent and/or corrupt' and that 'our blended learning strategy is a mix between quite sinister and entirely fraudulent'. Bob elaborates later when he explains that 'I don't know if you have ever looked at the University's [social media] and it's not interactive at all, it's just a facade and performance of what they think makes them look modern and progressive but actually its fake, they don't reply to things, they delete comments they don't like'.

Bob contends that Ed Tech is often 'imposed for some other purpose' and that 'things are imposed arbitrarily and sometimes they work and sometimes they don't, but it's not a collegiate structure and therefore people start to believe that the motives aren't educational but economic or managerial'. He goes on to suggest that technology is 'imposed for either... convenience or some very uncritical enthusiasm that isn't communicated or justified' and that 'most of our colleagues are enthusiastic about using IT as long as it's not used to either replace us or to distance us from the students'. Bob suggests that 'the tail's wagging the dog and it works across the University and its things like erm, you know, the IT system has taken over' and cites the example of registry changing student submission sheets from anonymous to non-anonymous marking 'because it suited registry to have everyone's student's name on the front cover'.

Bob believes that an institutional desire for efficiency is the key motivation for the imposition of certain forms of Ed Tech above others. His view that 'I think quite often it's a means of cutting corners, of cutting down on face to face contact erm, saving on rooms, saving on staffing' reflects a certain anxiety about where the institution may be heading. It is indeed possible for Ed Tech to facilitate the management of larger groups of students, but he objects to using 'ICT in this reductive and anti-educational way'. He refers to Ritzer's work on the McDonaldization of the University which sees the 'chopping activities into small pieces' or the Balkanisation (fragmentation) of the University into smaller pieces that is more conducive to machine delivery, something which Bob believes is 'deeply reductive and actually a very, very reactionary thing to do to our kind of students'.

He believes very much that academics should be at the forefront of deciding what forms of technology they should use since 'I know what's out there... and I am heavily into new media' and 'I'm friends with people who are experts in the field' and 'some of my colleagues have won national awards for their use of e-learning'. He believes that 'control is not with the educators as in so many areas of this University' and 'nobody actually asks us what we, what they can do for us, or what might work or what might not work'. He argues that 'the people who see the students everyday aren't the managers and aren't the erm IT people and aren't the educationalists; some of whom rarely go near a classroom' and that 'we've got an entire university staffed by experts and they're



the ones who are never consulted about anything, and that works across the University'. Again, he asserts that staff 'would be much more open to IT if we were presented with the range of incredible possibilities that there are out there and then left to play with it and then left to find out whether it works for our particular activities'.

Bob challenges the presumption that our students want the latest tech: 'this idea that all our students live entirely in a mediated world and that that's what they want, well I think that's a massive misunderstanding'. He believes that 'a lot of our students use IT selectively' and 'they're not always massively impressed by the idea if it's on a computer screen it must be the future'. He explains that 'I run several forums for class and they work brilliantly but the students are very suspicious that this is being used as a replacement for teaching and they want face to face contact'. Overall Bob believes that the HEI approach to blended learning is 'a rather uninformed utopian idea of what IT can do' he believes that we should re-consider exactly 'What and who is this institution for?' rather than make assumptions about what our students want.

Bob's critique for the HEI continues with the idea that the University is driven by 'neophiliacs, whose... personal prestige depends on them being as up to date as possible and therefore they'll advocate whatever's coming along without a... critique which I, which I think is damaging and looks embarrassing'. He cites the example of [named software] where Universities established a presence in what they thought was a digital future, but the public didn't take to it so 'the tumbleweed is rolling through the imaginary streets' consequently. Far from impressing the students Bob believes that 'they find the University's attempts to, you know, use [social media] kind of embarrassing, it's like having your Grandad, have a go'. Bob advocates a more 'critical approach to these things than just, erm, blind enthusiasm for whatever's flavour of the month'.

In addition to rejecting all forms of institutional control, Bob also objects to the use of [social media] as a pedagogic tool or learning platform on ethical and privacy grounds. In his personal life he is a child protection officer for his chosen recreational sport, with guidance for social media contact with clients, and he is concerned that 'we don't really have either a pedagogical or a social strategy for this which is quite worrying'. He explains that 'we've certainly had students say to us: "look Face Book, its mine it's my social life, I don't particularly want my teachers or my university being part of that life"'. Bob says, "I've got a blog and I tweet, but I want control over my own data'. So there appears to be a personal predilection for other platforms since [named product] is considered 'a commercial company which sells their personal data on for profit as a business model'.

Bob considers it important to root our use of Ed Tech within critical pedagogy: 'what we want to do is something called symbolic exchange which is a messy, expensive, complicated but that's the meaning, that's where (you know) meaning is generated'. He believes that staff need to be 'persuaded, of the pedagogical and intellectual rational for whatever's being proposed' because 'when it comes to blended learning some things you can do are absolutely brilliant'. Although much of his story related to institutional critique he is quite optimistic about Ed Tech incorporated more meaningfully: 'horses for courses rather than just this blanket imposition of a magic figure or particular platforms'. He goes on to say:

'There's definitely a place for these things. I did my mid module evaluation on my XXXX module last week and we have lecture seminars and an online forum and I said to them [students]: how is the forum going and they were hugely enthusiastic and they wanted to know if I could, erm, set up a chat room where they could use it outside the assessed bit so I was hugely pleased with that. I mean you see people who won't speak in class coming out with wonderful work and then you also see people who log in a minute before the activity is

due to close and go 'I agree' so there's a whole range of, range of uses and it depends on their perception of whether it's a useful educational activity'.

## **Bob's Story 2**

(Based on transcription from round two. Used as a recap at the beginning of round three. It also includes those themes that I asked Bob to expand upon during the 3<sup>rd</sup> round. This is to be transparent about my own pre-occupations in the data, find out more about participant idiosyncrasies and to explore the themes that were now becoming increasingly common other transcripts.)

Reflecting on his last interview, Bob referred to it as 'therapy' and explained that my 'interpretation is absolutely fine, and I hadn't remembered how, how, erm, whinging some of my comments were'.

Bob's role has changed since the last interview, now having a much more developed research profile and being involved in more University wide roles: 'I've seen things from different places now because my institutional position's changed a bit'. He has become an external examiner and is also 'getting information from the very top level and I'm sitting on various committees and review groups', so he believes he knows a lot more about 'how things are done'. With this new perspective he is 'coming to the conclusion that there's less conspiracy in most places... but there is a certain amount of, people at a very senior level who perhaps weren't digital natives'. On this basis, Bob would probably revise one or two of the ideas he articulated in the previous interview.

Bob saw the School/Faculty restructure as a 'good opportunity to revisit what we do' though 'it has been a very difficult period' for all staff. He feels that too often 'pre-existing patterns have been imposed on us' and 'it hasn't felt like we've been trusted to propose ways forward'. As such, while Bob recognises the importance of management and administration 'that ensures the institution is in good health' he maintains a disdain for 'linear and hierarchical' management structures. He argues that when 'senior management talk about, erm, the top and the bottom and cascading things down' this is antithetical to what a University should be. Bob believes that:

"The management is not the institution. The management is a network that holds an institution together. They work for students and academics, they forget it because they have so many important things about keeping us afloat... But we are also the institution."

Bob believes that students and the production of knowledge should be at the heart of what the University does, not customer and business facing initiatives.

"I mean you've always got that fundamental tension that a successful academic, erm, is an independent critical thinker. But many educational institutions, not all the time, but go through patches of being extremely dictatorial, and the two don't go well together... and sometimes the institution's right and sometimes the critical thinker is right."

Bob believes that since the 'University operates more and more explicitly as a business', colleagues and students are more like 'pawns on a chessboard'. He believes that it's easy to believe 'that there are technological solutions to complex problems' and mentions the NHS and Department of Welfare as examples of notoriously poor IT implementation. He explains that, until recently, 'It was possible... for a student to drop out of this University without speaking to a human being'. Compounding this is the idea of neophyte management that Bob feels don't have the appropriate skills to make 'big decisions about these things' because they 'don't really know very much about what's around'.

Bob believes that IT systems can widen participation ('which is one of the University's primary concerns') by using simplified systems that can cope more efficiently with large student numbers. However, he believes that 'technology is not the solution to every problem' and it is better to employ more staff and do things right by providing the 'richness and personalised attention that every student deserves' rather than being preoccupied with efficiency and 'treating students as a problem'. He also worries about 'seeing IT as a replacement for a lot of things, rather than a complement', citing MOOCS as an example of 'missing the live aspect of good education'.

Bob recommends a more measured and evaluative approach to using technology instead of a 'headlong rush for technological solutions, to either non-existent problems or wider cultural problems'. There is a temptation to move fast to keep up with technology, but what is deemed new or industry standard can change very quickly indeed, and this can become a drain on resources. Bob says that 'I keep an eye on what's around out there' but 'you also need an expert to say, this *is* the industry standard'. He believes that with more circumspect technological engagement we can think more carefully about pedagogically led technology use.

Bob laments that the University tends to say, 'here's a new thing, you've got to use it' which he believes is counter-productive to educational technological usage. Instead, Bob argues for obligatory CPD opportunities for staff, sabbaticals to pursue technological ideas, training courses and adequate piloting of initiatives. He argues that technology evolves in unpredictable ways, so it is 'hard to know what's going to last, what's going to be useful, until you try them out'. He also believes that 'the informal transmission of experience based useful knowledge' from peer to peer 'works better than a central directive':

"I wouldn't start with a list of stuff that's technically impossible. I would say, at the start of a very long process, what is our ethos, how does our current practice fulfil that ethos and how does it fall short? What do we need to add to this? And that would be a conversation with experts, pedagogic, subject and technological. And then I would be saying, OK we've identified these needs, here are the technologies that may support this, and then test them. Slowly and carefully and not be wedded to them."

More importantly, technology should be incorporated for pedagogic purposes rather than other reasons. Bob believes we have students with certain needs which can be addressed via technological means. As such, Bob suggests that technology can create communities of practice for students to interact and discuss classroom matters in the absence of physical space provision. Bob argues for a learning experience based on a 'fluid exchange of views' that is 'drawing on *their* cultural capital and also them providing you with more' so there is a more equal relationship between tutor and student (as academics in the making) that are educating themselves here.

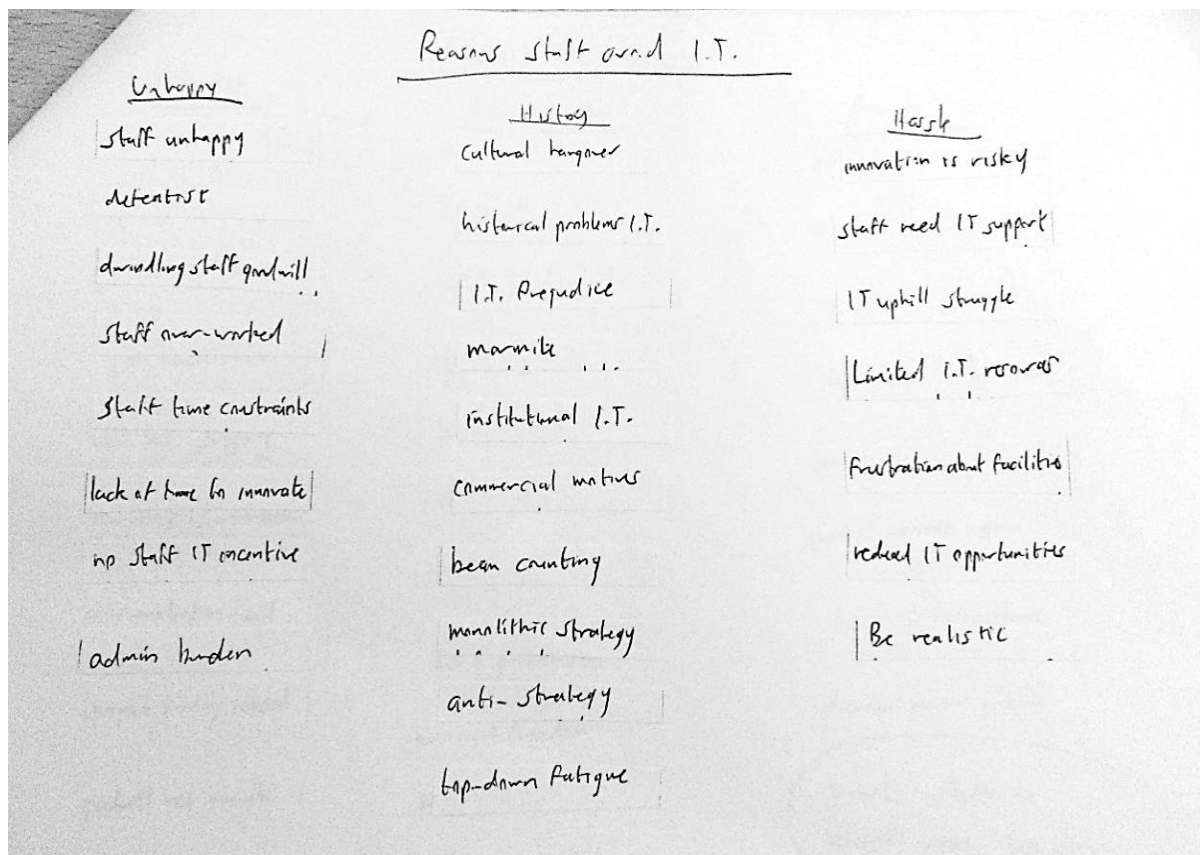
Bob has always championed the idea of using less IT in the classroom because he wants to avoid 'style over substance' and he thinks that 'PowerPoint puts them in a comfort zone where I can relax, and they can relax, and it implies a linear transmission of fact or knowledge'. He also believes that there are ethical considerations when we interact with students in their social space through social media. Even if it is convenient and pedagogically sound to use social media for teaching, we are intruding upon their private lives since many of our students 'very much separate online space from pedagogical space'. Also 'Apart from anything else, if it's free, you are the product... all the content you provide them is data that they sell, that's the commercial model'

## F – Coding and analysis

### Coding by hand

This is an example of Eve's emergent codes being re-ordered and represented into categories and one super-category to unite them. So, the ground-up emergent codes have been ordered into the super-category of 'Reasons staff avoid IT' which has sub-categories of (Being) 'Unhappy', 'History' and 'Hassle'. The codes were originally written by hand, cut out, rearranged and then glued on a new sheet of paper once a meaningful order was arrived at.

Again, I am not trying to claim I am addressing the research questions here. This is an example of the ground-up opportunistic and emergent coding to try and achieve new understanding compared to when the research began. All interesting ideas for re-storying.



## IPA informed transcript annotation

This is what one page of an example transcript looks like after three passes of IPA annotation and some preliminary evaluative codes on the left. The highlighted sections show where the RQs are being addressed. Some very early emergent codes found on the left for the whole transcript are:

1 WOLF, I never really got on with PebblePad very much [int: OK] erm, but, really on WOLF but again I started off by just st- sharing things with students [int: hnm-mm] rather than having conversations with students which is much more what I try to do now, but I've moved away from WOLF because I think a lot of people have...

2 much [int: OK] erm, but, really on WOLF but

3 again I started off by just st- sharing things with

4 students [int: hnm-mm] rather than having

5 conversations with students which is much more

6 what I try to do now, but I've moved away from

7 WOLF because I think a lot of people have...

8

9 Pritpal.

10 So you've moved away from WOLF?

11 Zak.

12 Well Web 2.0 seems to have, again, afforded free and open opportunities [int: OK] that, in my view probably better than what WOLF provides at the moment [int: right] but that might change once, once WOLF develops into something else.

13 Well Web 2.0 seems to have, again, afforded free

14 and open opportunities [int: OK] that, in my view

15 probably better than what WOLF provides at the

16 moment [int: right] but that might change once,

17 once WOLF develops into something else.

18 WOLF is closed & constrained, 'Open' suggests the potential state of being, WOLF may be 'closed' then?

19 Pritpal.

20 So in your view, what's the fundamental difference between something like Web 2.0 then and er, and WOLF and Pebblepad, erm?

21

22

23

24 Zak.

25 Because, if you go back to that comment I made about creativity [int: hm] I think there's an opportunity in the way Web 2.0 works to be open and free [int: hnm] in terms of er, being having, being able to have a relevant conversation [int: hnm] with students and the students to work peer to peer [int: OK] as well [int: OK]. For example, looking at formative work [int: hnm-mm] where I don't have to intervene on the formative, the students will look at it themselves [int: hnm] and they'll make comments and I can have a look at the comments and maybe but now and again [int: hnm, hnm]. Now, again that's what makes me think that the division between technology and art is artificial [int: OK] really and I think that it allows me a much greater opportunity to push...

26 Because, if you go back to that comment I made

27 about creativity [int: hm] I think there's an

28 opportunity in the way Web 2.0 works to be open

29 and free [int: hnm] in terms of er, being having,

30 being able to have a relevant conversation [int: hnm]

31 with students and the students to work peer

32 to peer [int: OK] as well [int: OK]. For example,

33 looking at formative work [int: hnm-mm] where I

34 don't have to intervene on the formative, the

35 students will look at it themselves [int: hnm] and

36 they'll make comments and I can have a look at the

37 comments and maybe but now and again [int: hnm, hnm].

38 Now, again that's what makes me

39 think that the division between technology and art

40 is artificial [int: OK] really and I think that it

allows me a much greater opportunity to push...

Page 5 of 13

## Emergent Codes

Mischievous  
Sardonic  
Digital Immigrant  
Self-Confidence  
Changing View  
Generalising  
Pedagogic theory  
Long Career  
Hazy Memory  
Partisan software  
Resistance to HEI tools  
Desires Web 2 Freedom  
Creative Pedagogy  
Relevant Conversation  
Student Conversation  
Circumvent HEI control  
Self-efficiency valued  
Social Space encroaching  
Ethical interaction  
Naïve  
Virtual Rebel  
Ethics and boundaries  
Safety & space  
Trust assumptions  
Interactive pedagogy  
Spontaneous learning  
Regular discussion  
Open minded

The next step would be to arrange these into around 8-10 master categories, with each of these being perhaps one paragraph of the 'Restory' or 'Story+' or 'Narrative Rendering'. Remember that these codes are not for addressing the RQs yet. The blue highlights are relevant to RQ1 and the pink to RQ2. There was little relevant to RQ3 in this sample transcript.

## G – Ethical approval

### Request for Ethical Approval

#### Section 1 – to be completed by the researcher

Full name	Mr Pritpal Singh Sembi
Module number and title (student researchers only)	N/A
Research Proposal title	Staff Perceptions of IT Policy within the School of XXX, XXXXXX XXXXXXXXX and XXXXXXXXXXXXXXXX (University of XXXXXXXXXXXXXXXX)
Brief outline of proposal	I am trying to gain a longitudinal understanding of why staff resist the implementation of University endorsed ICT innovations via institutional strategies. By providing a comprehensive 'voice' to those members of staff who are involved in technology implementation (i.e. with in-depth interviews) we can hopefully try to understand staff resistance a little better, with a view to potentially improving practice in future. Potential contributors may include: academic teaching staff colleagues, associate deans, IT services, IT facilitators, support staff, trainers and other senior management as deemed necessary.
Level of research, e.g. staff, undergraduate, postgraduate, master's (award related), MPhil, PhD	EdD
Please outline the methodology that would be implemented in the course of this research.	Mixed methods approach to gain an intensive and in-depth insight into the matter. I used a mix of semi-structural survey and exploratory interviews during the pilot phase. This will be followed up with detailed Case Study, informed largely by Narrative Inquiry (in-depth interviews), but also by analysis of existing data (documents, research) and other methods as deemed relevant.
Please indicate the ethical issues that have been considered and how these will be addressed.	<p>I will be asking members of staff for their honest experiences of corporate ICT educational strategies in their host institution during interviews. They may disclose personal, controversial or confidential material during interviews. I aim to address this by anonymising their interview data (as I did with the pilot data) and removing reference to anything that may 'identify' the research participants in any published material.</p> <p>I will give staff the option to 'skip' any questions they're not comfortable with and to withdraw their consent at any time before the formal questionnaire</p>

	<p>and interview transcript analysis. Research participants will be given the opportunity to review their transcripts &amp; questionnaire responses, as part of the 'iterative and hermeneutic' circle of sense making embedded within the research methodology, which should also help avoid any ethical issues.</p> <p>During the process I anticipate that there may be some negative opinions expressed about certain internal groups, departments or policies. I am aware of such sensitivity so, in the first instance, access to the final thesis will be restricted to members of the supervisory and examination team. Institutional consent will be sought before further/wider dissemination.</p> <p>At the end of the whole process I will offer to circulate a draft thesis to research participants if they wish to see the results.</p>
Please indicate any issues that may arise relating to diversity and equality whilst undertaking this research and how you will manage these.	<p>It is important to make sure, where possible, that I choose a sample of staff participants that reflects the diversity of the workforce. I hope to create a 'representative' sample of the workforce regarding ethnicity, gender, age, disability, etc. However, participants will be chosen primarily for their potential illuminating insights rather than their social categorisation.</p>

Please answer the following questions by deleting the inappropriate response:

1. Will your research project involve young people under the age of 18? **No**

If yes, do you have an Enhanced Disclosure Certificate from the Criminal Records Bureau?

1. Will your research project involve vulnerable adults? **No**

2. For which category of proposal are you applying for ethical approval? **A**

### Confirmation of ethical approval

**Section 2 – to be completed as indicated, by module leader, supervisor and/or chair of ethics sub-committee**



**For Category A proposals:**

I confirm that the proposal for research being made by the above student/member of staff is a category A proposal and that s/he may now continue with the proposed research activity:

For a student's proposal – Name of module leader or supervisor giving approval	
For a member of staff's proposal – name of chair of ethics sub- committee giving approval	
Signed	
Date	

Feedback	

**Category B proposals:**

I confirm that the proposal for research being made by above student/member of staff is a category B proposal and that all requirements for category B proposals have been met.

Feedback	

**On behalf of students (only):**

Name of module leader or supervisor	
--	--



Signed	
Date	

**On behalf of members of staff and students**

I confirm that the proposal for research being made by above student/member of staff is a category B proposal and that s/he may now continue with the proposed research activity:

Signed	
Name of chair of ethics sub-committee	
Any conditions attached to this ethical approved (attached on a separate sheet)	Yes No
Date	

**Checklist of submissions required for category B proposals:**

Outline summary: rationale and expected benefits from the study, with a statement of what the researcher is proposing to do and how	
Explanation of the methodology to be used	
An information sheet and copy of a consent form to be used with subjects	
Details of how information will be kept	
Details of how results will be fed back to participants	
Letter of consent from any collaborating institutions	
Letter of consent from head of institution wherein any research activity will take place	

## H – Participant consent form

### **Staff Perceptions of I.T. in the School of XXXX, XXXXX of XXXXXX. A project in partial fulfilment of the award of Doctorate in Education – by Pritpal Sembi.**

#### **Information Sheet and Participant Notes:**

1. I am a Doctoral Student at the School of XXXX, as well as Senior Lecturer in XXXXX in the School of XXXXX – at the XXXXXX. I am conducting interviews for my doctoral research on academic staff perceptions of Information Technology within the School of XXXXXX.
2. During this interview, you will be asked to answer some questions about your perceptions of I.T. The interview is designed to be approximately a 1-2 hours in length [estimate only].
3. If there are any questions you would rather not answer or that you do not feel comfortable answering, please say so and the interview can be stopped or we can move on to the next question, whichever you prefer.
4. I will keep the interview audio data in a secure location and it will be professionally transcribed. Only the research team, the transcription service provider and the supervisory team will have access to the unedited data. Upon completion of the project all data will be held in a secure location or destroyed in the case of the transcription service.
5. These transcripts will then be edited carefully to remove any material that may identify you or material that may be defamatory, libellous, incriminating or otherwise potentially harmful to yourself or others. The risks are that, without rigorous editing, your comments might be attributable to you and this could place you into a vulnerable position. Whilst every effort will be made to make the material confidential, we cannot guarantee this. As a consequence, there will be an opportunity to review the edited transcripts before they are used.
6. Parts of the edited interview transcripts may be disseminated via conference papers, presentations, training session, or within written articles/papers. Your name will never be identified within dissemination of this nature.
7. Your decision to take part is entirely voluntary. There will be no payment for the interview and the results of the interview may, or may not, benefit you personally. When the research is completed it will help us to understand more about staff perceptions of I.T. within the school of XXXX.
8. If you have any further questions please contact: Mr Pritpal Sembi ([XXXXXX](#)), Senior Lecturer – XXXXXXXXX.

**Mr Pritpal Sembi**

**P.T.O.**

**Staff Perceptions of I.T. in the School of XXXX, XXXX of XXXX. A project in partial fulfilment of the award of Doctorate in Education – by Pritpal Sembi.**

**Participant Agreement:**

1. I voluntarily agree to be interviewed for the purposes of the student assignment named above. I understand the intent and purpose of this research. If, for any reason, at any time, I wish to stop the interview, I may do so without having to give an explanation.
2. The purpose and nature of the interview has been explained to me, and I have read the 'Information Sheet and Participant Notes' as provided by the researcher. The researcher has reviewed the risks of this project with me and any questions that I asked about the purpose and nature of the interview and assignment have been answered to my satisfaction.
3. I agree that the interview will be audio recorded then later transcribed. I understand if I say anything that I believe may incriminate myself, or mentioned something I feel uncomfortable about, it is my duty to inform the interviewer. He/she will offer to delete this section of the interview and ask me if I would like to continue.
4. I understand that the researcher will not identify me by name in any reports or presentations using information obtained from this interview, and that my confidentiality as a participant in this study will remain secure. I understand that information regarding my personal identity will be kept confidential, but that total anonymity is not guaranteed. As a consequence, I have the right to review, comment on and edit information any time in the future.
5. I agree that my data gathered in this study may be stored (after it has been anonymised) in a secure location and may be used for future research.
6. I have been offered a copy of this consent form that I may keep for my own reference.

Name of interviewee\_\_\_\_\_

Signature of interviewee\_\_\_\_\_ Date\_\_\_\_\_

I have explained the project and the implications of being interviewed to the interviewee and I believe that the consent is informed and that he/she understands the implications of participation.

Name of interviewer\_\_\_\_\_

Signature of interviewer\_\_\_\_\_ Date\_\_\_\_\_

Please return to Pritpal Sembi, XXXXXXX.